

Greater Derry Greater Salem Regional Transit Plan

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LIST OF ABBREVIATIONS

ADA.....	Americans with Disabilities Act of 1990
AEF	Alexander Eastman Foundation
CHS	Community Health Services of Greater Derry
CLM	Center for Life Management
CMAQ	Congestion Mitigation/Air Quality Program
COAST.....	Cooperative Alliance for Seacoast Transportation
CTAA	Community Transportation Association of America
CTPP	Census Transportation Planning Package
DEAS	Division of Elderly and Adult Services
DFA.....	Division of Family Assistance
EFA.....	Endowment for Health
EPA.....	Environmental Protection Agency
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
FY	Fiscal Year
GDGS	Greater Derry Greater Salem (study area)
GIS.....	Geographic Information System
ISTEA.....	Intermodal Surface Transportation Efficiency Act of 1991
ITS	Intelligent Transportation Systems
KNC	Kimi Nichols Center
MBTA.....	Massachusetts Bay Transit Authority
MPO.....	Metropolitan Planning Organization
MSA	Metropolitan Statistical Area
NHDHHS	New Hampshire Department of Health and Human Services
NHDOT	New Hampshire Department of Transportation
NRPC.....	Nashua Regional Planning Commission
PAC.....	Project Advisory Committee (for this Regional Transit Study)
RPC	Rockingham Planning Commission
RTAP	Rural Technical Assistance Program
RTC.....	Greater Derry Greater Salem Regional Transportation Council
SNHPC	Southern New Hampshire Planning Commission (Manchester area)
SPR.....	State Planning and Research Program (funding for this study)
STS	Easter Seals of NH Special Transit Service, Inc.
SUZA	Small Urbanized Area
TE	Transportation Enhancement
TEA-21.....	Transportation Equity Act for the 21 st Century
TIP	Transportation Improvement Program
UZA.....	Urbanized Area

Chapter 1. Introduction

INTRODUCTION

The eleven-town Greater Derry Greater Salem region is the only urbanized area in the state of New Hampshire that currently lacks regular fixed route transit service. Close to 20 health and human service agencies operating in the region offer some level of demand response transit service. While these agencies have done a remarkable job in providing a basic level of service, most of these transportation programs are underfunded and understaffed add-ons to the agencies' primary missions, and are not coordinated with efforts of other agencies. The limited nature of transit in the region creates a barrier to accessing health care and fully participating in community life for many of the region's elderly, disabled, low-income, and otherwise transit dependent residents.

This plan to expand transit service in the region is the result of a year long planning process, but it also builds on a series of efforts to meet the need for public transportation extending back almost 25 years. It reflects the efforts of dozens of people and organizations in the region committed to expanding accessibility for the region's transit dependent residents.

The document analyzes the need for public transportation in the region, the current level of demand response transit service available, and options for structuring and funding service improvement. Based on this analysis, it sets out an action plan for improving transit service in the region through a combination of coordination and expansion of existing demand response transportation services, and development of standard fixed route public transportation service. Implementing the plan's recommendations will be a multi-year process. It will also be dependent in large part on securing adequate federal, state, local, and private funding to support transit service on an ongoing basis. It will also depend on the willingness of existing transportation providers to come together and share resources in order to provide a higher level of service to people in need in their communities.

Achieving the needed level of cooperation and securing ongoing funding for transit are both significant challenges, but they are far from insurmountable. Through the study process provider agencies have become more familiar, and consequently more comfortable, with the concept of coordination and its implications for their organizations, their clients, and the region. In terms of funding, the plan identifies and analyzes a range of sources that can be tapped to implement the plan's recommendations.

PROJECT BACKGROUND

The lack of public transportation in the region has been identified as a major barrier to accessing health care in the region in a series of studies since 1978. Most recently, a 1997 needs assessment by the United Way identified lack of transportation as one of the most pressing human service needs in the region. This United Way study spurred the creation of the Greater Derry Greater Salem Regional Transportation Council (RTC) in 1998. The RTC is a 501(c)(3) non-profit corporation established with a mission to assess, plan, seek funding for and develop a strategy or program which will most effectively and efficiently meet the transportation needs of the elderly, disabled and transit dependent residents within the combined communities of the

Greater Derry and Greater Salem region. These communities include Atkinson, Chester, Danville, Deny, Hampstead, Londonderry, Pelham, Plaistow, Salem, Sandown and Windham.

In the spring of 1999 the Council hired a full-time Project Coordinator, and went through the process of recruiting and training a Board of Directors, obtaining nonprofit status, and raising funds to cover operating costs for a lift-equipped van. This van, along with a second van funded by Community Health Service of Greater Derry, is operated by Special Transit Service, Inc., of Manchester. Since 2000 the vans have provided over 12,000 rides to residents in the 11-town region for medical, social, recreational, and other trip purposes.

PLANNING PROCESS

In the fall of 2001 the RTC, together with the Rockingham Planning Commission, the Southern NH Planning Commission, and the Nashua Regional Planning Commission, secured a State Planning and Research (SPR) grant from the NH Department of Transportation to: 1) Identify and document the need for transit within the combined communities of the Greater Derry and Greater Salem region, and 2) To develop a strategy to most effectively and efficiently meet the transportation needs of the transit dependent residents in the region.

The project has been implemented by a team of staff from the three regional planning agencies, and staff and board members from the Regional Transportation Council. The project team also received extensive technical assistance from Barbara Singleton, Director for Community Technical Assistance with the Community Transportation Association of America.

The planning process was launched on September 20, 2001 with a kickoff meeting attended by representatives of more than 20 agencies involved with transportation and human services in the Derry-Salem area, and the 11 towns in the region. Out of this group, a Project Advisory Committee (PAC), was formed with representatives from human service/ transportation provider agencies, local government, the NH Department of Transportation, the NH Department of Health and Human Services, and transit users.

The PAC met eight times between November 2001 and December 2002 to provide input to the study process: developing goals and objectives for transit service improvement in the region, reviewing draft chapters, and providing guidance at key points through the project.

Project team members also held three rounds of individual meetings with provider agencies. These included an initial round of interviews in October-November 2001 to develop profiles of agency missions and transportation programs; a second round of interviews in May-June 2002 to gather input on service coordination options; and a final round of meetings in November-December 2002 including staff from Special Transit Service, Ltd., (the recommended broker agency) to discuss specifics of how individual agencies can participate in a coordinated system.

Figure 1.1 Project Study Area/Regional Transportation Council Service Area

Greater Derry / Greater Salem Regional
Transportation Council Communities and
Regional Planning Commissions

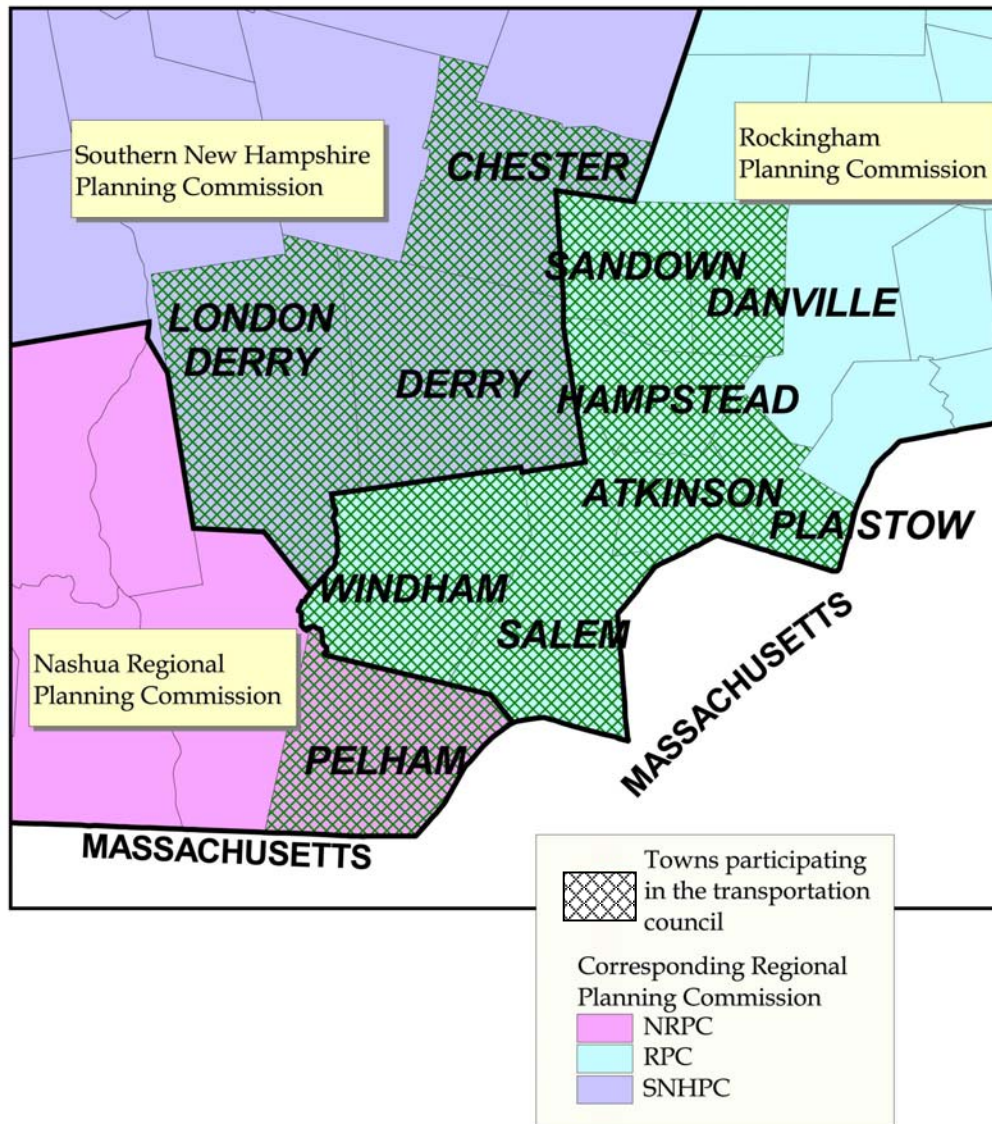


Figure 1.1 shows the eleven town study area, which corresponds to the service area for the Greater Derry Greater Salem Regional Transportation Council. It also shows the boundaries of the three regional planning commissions involved in the development of the study.

GOALS & OBJECTIVES FOR REGIONAL TRANSIT SERVICE

To guide this study and the recommendations stemming from it, the Project Advisory Committee adopted the following goal statement:

"Develop a coordinated, easily accessible transportation system that provides quality services to the transit dependent residents of the Greater Derry Greater Salem region."

The Project Advisory Committee also defined the following objectives to be met in pursuit of this goal. The recommendations and implementation plan included in Chapters 6 and 7 are structured to address each of these.

Objective 1. Increase the efficiency of transit service provided in the region

Close to twenty agencies currently provide transit service in the region. However, as with most non-coordinated systems, agencies are largely unaware of other agencies' routes, schedules, and eligibility criteria. While some agencies must deny trips for lack of capacity, other agencies' vans sit idle. In addition, inefficiencies exist when multiple agencies each must devote staff time to trip scheduling and dispatching – especially when these roles are filled by other highly trained program staff such as nurses, therapists, and case workers. To address this problem the project Advisory Committee prioritizes establishing a central trip coordination point, and coordinating schedules to increase the number of riders transported per vehicle run.

Objective 2. Expand service availability for the transit dependent population

Transportation available in the region currently is limited geographically, by time of day and day of the week, by populations served, and by capacity to meet even the current need. The Project Advisory Committee supports expansion of transit in the region to provide weekend and evening service; provide improved service to the elderly and disabled as well as basic access for groups not currently served, such as low-income workers and youth; and address barriers to interstate health care access.

Objective 3. Improve ease of access to the system

Improving ease of access to the region's transit system includes establishing a central coordination point with one number to call to limit confusion on the part of users. It must also include expanded marketing of demand response service in the region to ensure residents are aware of the resources available.

Objective 4. Establish common standards for service delivery

Establishing common standards for service delivery is central to any transit coordination effort. Using transit can be a daunting thing for riders who are unfamiliar with a transit system. Ensuring a high quality of service for customers, increases users' sense of comfort and safety, and the likelihood that they will use the system to meet their needs and actively participate in community life. Common standards for driver qualifications and training, vehicle maintenance, and emergency response also manage risk and help limit the liability of provider agencies.

Objective 5. Establish fixed route transit service in the region within 5 years

Extensive fixed route service is usually not practical in an area with population densities as low, and development as dispersed, as much of the Greater Derry-Salem region. However, this sort of service may well be effective in the population centers of Derry and Salem, and to provide connections to employment, retail, and service centers outside of the study area such as Manchester and Methuen. Expanding transit access in the region to the general low income and youth populations will likely require some sort of fixed routes.

Objective 6. Secure funding to maintain and expand transit service in the region

The central challenge to expanding transit access in the region, and the state as a whole, is funding. Establishing and maintaining coordinated demand response transit service in the region as well as a fixed route system, will require a mix of local, federal, and private sector resources. Funding development will be an ongoing task for both the coordinating agency and other stakeholders involved in the system. Important aspects of this include supporting efforts to improve funding coordination between NHDOT and NHDHHS; seeking simplification of the Medicaid billing process; supporting NHTA efforts to increase funding for transit statewide; and encouraging creation of statewide commission to advocate for a dedicated source of state transit funding.

PLAN STRUCTURE

The proposed tasks to be addressed in the study include the following:

- A. Quantify need and potential demand for transit service in the Greater Derry-Salem region
- B. Inventory and document existing transportation services provided in the region
- C. Inventory and document major trip generators
- D. Map the collected data to identify service gaps and deficiencies
- E. Formulate a plan for transit service in the region including both demand response and fixed route systems.
- F. Identify and describe available transit funding sources

Tasks A, C, and D are addressed in Chapter 2, which maps and analyzes data on transit dependent populations in the region, including elderly, disabled, low income, youth, and the otherwise carless. Chapter 2 also inventories major destination for transit users, including large employers, publicly assisted housing, childcare, retail, healthcare, and community service centers. These sites are mapped at a regional level in Chapter 2, and at a detailed local level as part of the analysis of potential fixed route transit service in Chapter 5.

Existing public transportation service in the region is analyzed in Chapter 3, including profiles of individual provider agencies; and an analysis of the origins, destinations, and purposes of trips provided by these agencies.

Chapters 4 and 5 present options for coordinating and expanding demand response service in the region, and establishing fixed route service. Chapter 6 identifies a range of public and private funding sources available for transit nationally and regionally; and assesses the appropriateness of each given the characteristics of the region. Chapter 7 presents recommendations for expanding and improving both demand response and fixed route service in the region, while Chapter 8 sets out timelines and assigns responsibility for implementation of each of the recommendations.

Chapter 2. Transit Dependent Populations & Service Need

INTRODUCTION

The geographic area covered by this study consists of eleven towns, covering approximately 246 square miles. All but one of the towns is located in western Rockingham County, while the town of Pelham is located in Hillsborough County. The greater Derry-Salem region is the only urbanized area of the state that currently lacks a fixed route transit system. The following pages offer a demographic profile and an analysis of indicators for transit demand in the study region. The indicators of transit demand are divided into four categories: demographics, auto availability, income and disability. The analysis was largely conducted based on data from the 1990 and 2000 US Censuses, as well the NH Department of Health and Human Services. At the time of this writing, data on commute patterns from the 2000 Census are not yet available, but once released they will be used in planning potential fixed route service for the region.

POPULATION & AGE DISTRIBUTION

Total Population

The population of the Greater Derry / Greater Salem study region increased by 16% between 1990 and 2000. This trend is only slightly higher than increases experienced in New Hampshire and nationally during this timeframe. Communities located outside of the urbanized area, including Chester (41%), Danville (59%), Hampstead (23%) and Sandown (27%), experienced higher rates of growth.

Table 2.1 - Total Population

	Total Population (1990)	Total Population (2000)	Numeric Increase (1990-2000)	Percentage Increase (1990-2000)
Atkinson	5,188	6,178	990	19%
Chester	2,691	3,792	1,101	41%
Danville	2,534	4,023	1,489	59%
Derry	29,603	34,021	4,418	15%
Hampstead	6,732	8,297	1,565	23%
Londonderry	19,781	23,236	3,455	17%
Pelham	9,408	10,914	1,506	16%
Plaistow	7,316	7,747	431	6%
Salem	25,746	28,112	2,366	9%
Sandown	4,060	5,143	1,083	27%
Windham	9,000	10,709	1,709	19%
REGION	122,059	142,172	20,113	16%
NH	1,109,252	1,235,786	126,534	11%
US	248,709,873	281,421,906	32,712,033	13%

Source: 2000 Census

Elderly

The elderly population (65 and over) is a category of individuals that have a higher dependence on transit, as the ability to drive diminishes as individuals become older. **Table 2.2** shows that during the 1990s the elderly population of the region grew at a rate (36%) double that of the state (18%) and triple that of the nation as a whole (12%). This reflects an influx of retirees, especially into more rural areas of the region such as Atkinson and Danville, where the elderly population increased 84% and 57% respectively during the last decade. This reflects the increase of senior independent living communities as a housing alternative in the past decade. It is also a result of efforts by towns to attract senior housing as a form of development that produces property tax revenue without placing demands on school systems.

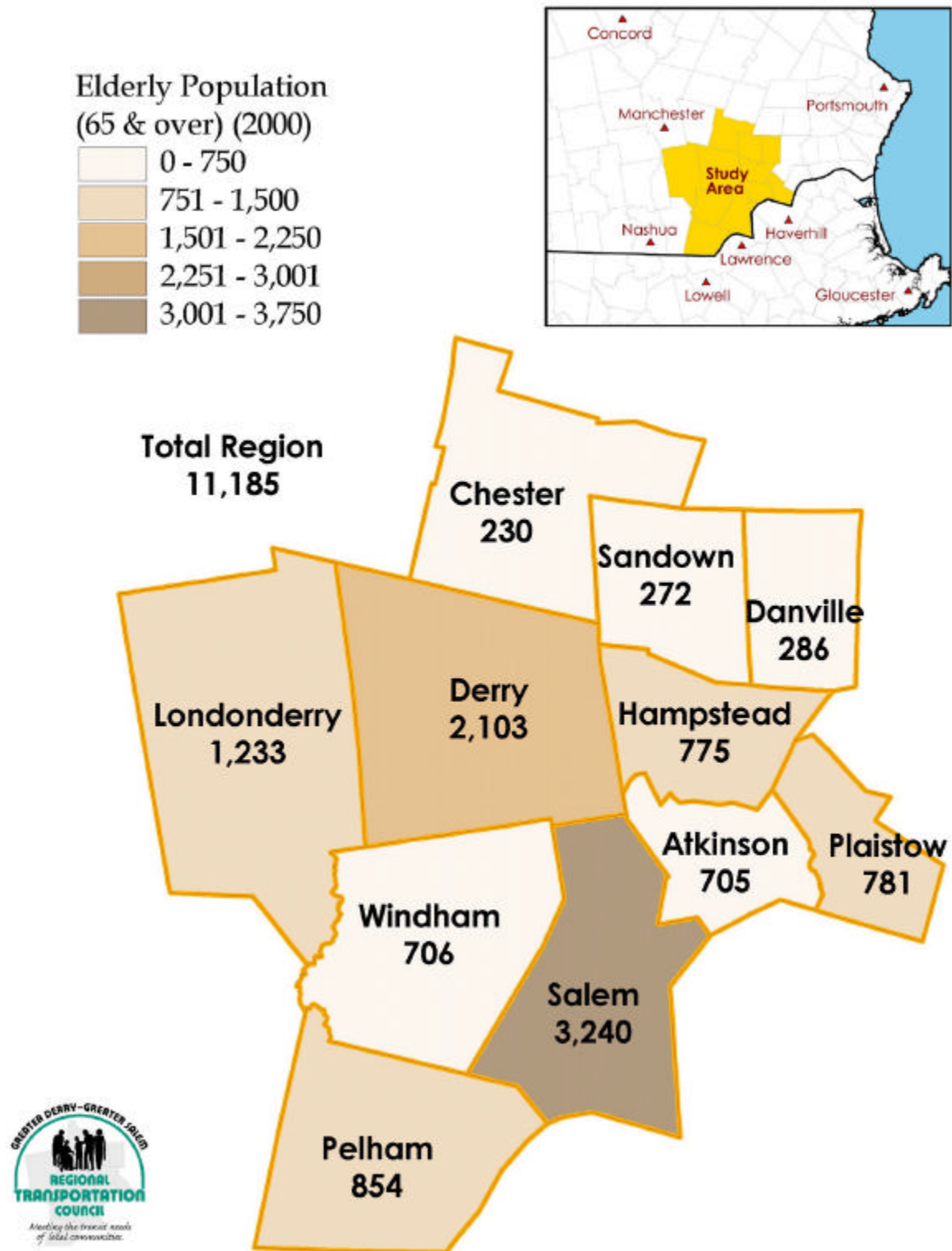
Even though growth in the number of elderly residents has been high, the elderly make up a smaller percentage of the population in the region (8%) than in the state as a whole (12%) or the nation (12%). The towns in the region with the highest composition of elderly residents include Salem (12%), Atkinson (11%) and Plaistow (10%). In spite of this low base, this high growth is likely to continue, and points to increased need for transit services to meet the needs of elderly residents in the coming years. Availability of transportation services for the elderly is certainly a quality of life issue, as elderly residents who can access transit are able to more fully participate in the community. It is a health and safety issue, as elderly residents without cars must be able to access health care, and many elderly residents with cars would be safer in a transit vehicle than behind the wheel. Finally, providing transportation services for elderly residents can be a matter of cost effectiveness, as providing services such as transportation that allow an elderly resident to maintain independence and live in their own home is less expensive than supporting that same individual in a nursing home.

Table 2.2 - Elderly Population

	Elderly Population (65 & Over) (1990)	Elderly Population (65 & Over) (2000)	Numeric Increase (1990-2000)	Percentage Increase (1990-2000)
Atkinson	383	705	322	84%
Chester	158	230	72	46%
Danville	182	286	104	57%
Derry	1,726	2,103	377	22%
Hampstead	531	775	244	46%
Londonderry	809	1,233	424	52%
Pelham	607	854	247	41%
Plaistow	574	781	207	36%
Salem	2,547	3,240	693	27%
Sandown	195	272	77	39%
Windham	542	706	164	30%
REGION	8,254	11,185	2,931	36%
NH	125,029	147,970	22,941	18%
US	31,241,831	34,991,753	3,749,922	12%

Source: 2000 Census

Map 2.1. Elderly Population



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Youth

Youth under 15 years old are another group that tend to use transit extensively where it is available, as they have not yet reached driving age, and transit offers a degree of independence from parents in accessing after school programs and recreational activities. For the most part youth are not served by the current demand response service in the region, but will be a key target population for eventual fixed route service in the region.

Similar to the elderly, the region's youth population grew at a rate much higher than the state or nation during the past decade. **Table 2.3** shows that the population under 15 in the region increased at a rate of 18% between 1990 and 2000, which is higher than growth in New Hampshire (9%) and the nation (12%) during this timeframe. Similar to the elderly population, the highest growth rates were in smaller towns with more buildable land. While these rural areas are more difficult to serve with transit than areas of more concentrated development, youth populations in the larger towns of Derry, Salem, and Londonderry all grew a well above the state average. Transportation needs for this rapidly growing population similarly build the case for expanded transit service in the region.

Table 2.3 - Youth Population

	Youth Population (Under 15) (1990)	Youth Population (Under 15) (2000)	Numeric Increase (1990-2000)	Percentage Increase (1990-2000)
Atkinson	1,042	1,290	248	24%
Chester	626	993	367	59%
Danville	591	1,021	430	73%
Derry	7,418	8,568	1,150	16%
Hampstead	1,659	1,985	326	20%
Londonderry	5,364	6,345	981	18%
Pelham	2,280	2,609	329	14%
Plaistow	1,566	1,701	135	9%
Salem	5,171	5,949	778	15%
Sandown	1,189	1,366	177	15%
Windham	2,199	2,660	461	21%
REGION	29,105	34,487	5,382	18%
NH	236,931	257,477	20,546	9%
US	53,567,871	60,253,375	6,685,504	12%

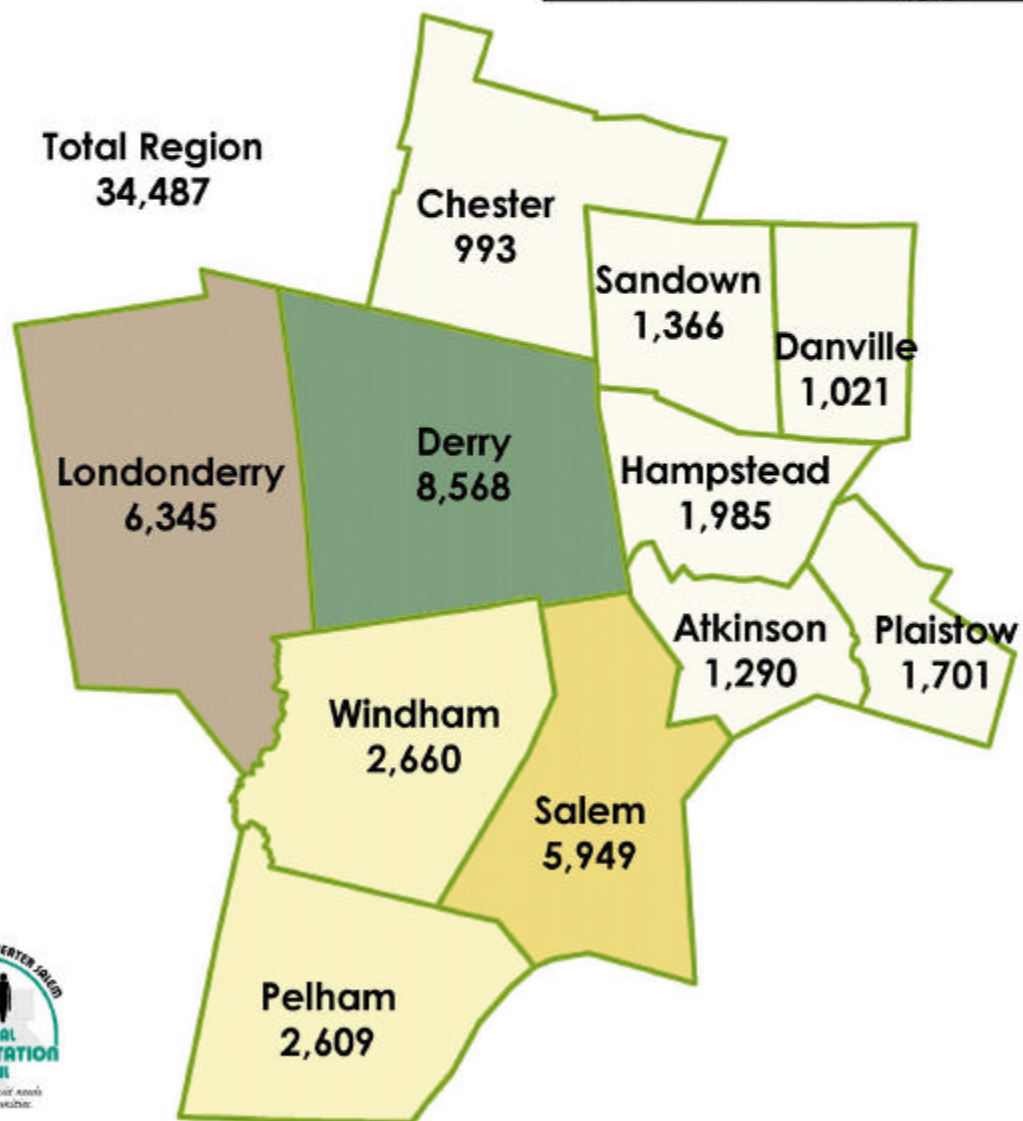
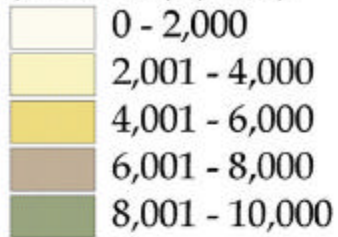
Source: 2000 Census

AUTO AVAILABILITY

The greatest indicator of transit utilization within a region is typically auto ownership, since individuals without the use of an automobile have to make transit trips to access work, shopping and other trips.

MAP 2.2 - Youth Population

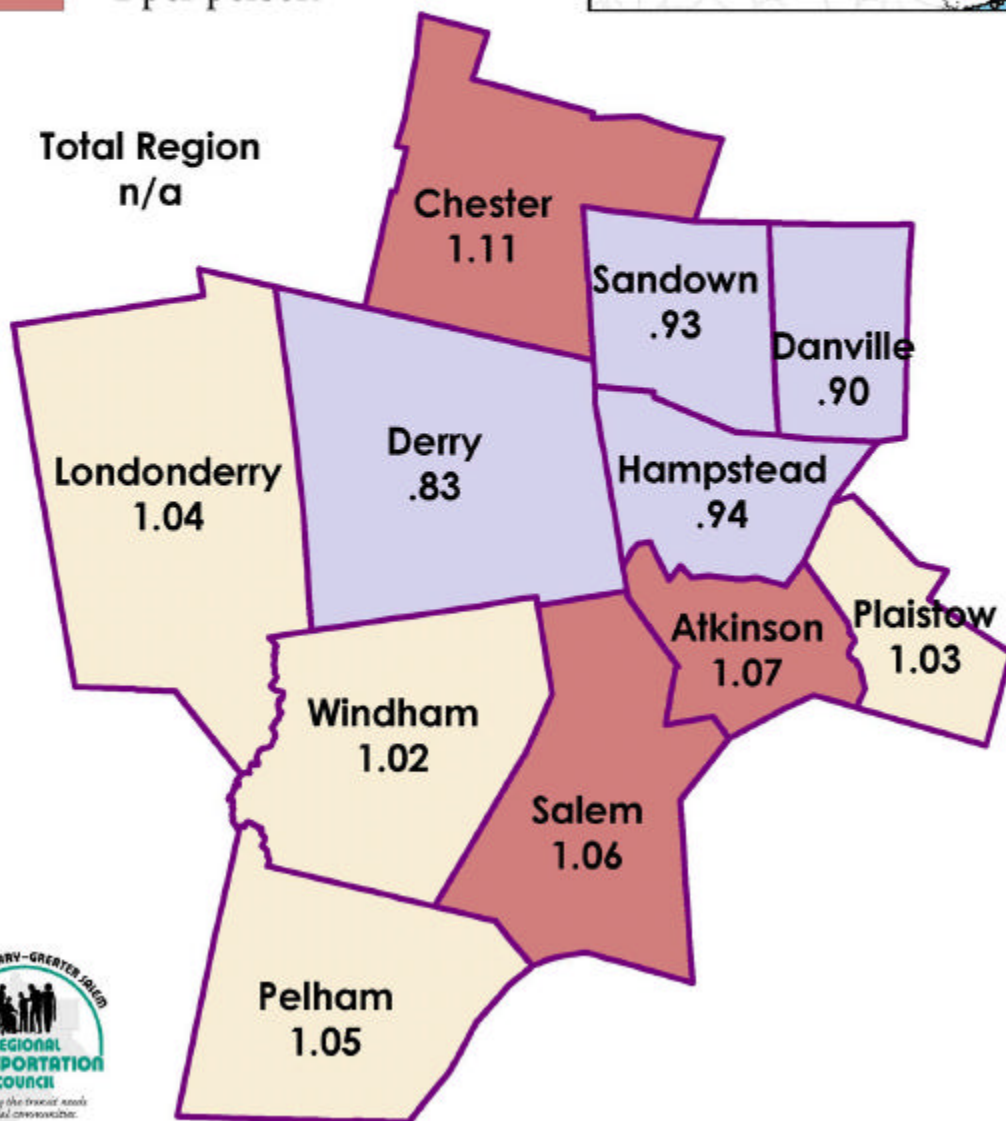
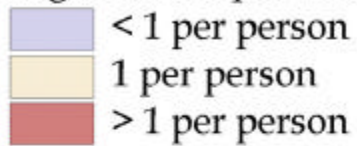
Youth Population
(under 15) (2000)



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Map 2.3 - Automobile Availability

Number of Current Auto Registrations per Person (2001)



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Over 1400 households in the region (3%) have no access to an automobile, and are fully transit dependent. Many of these households represent elderly residents, though low-income families and individuals often also lack private automobiles. By far the largest number of carless households is in the larger towns of Salem (442) and Derry (451), though Chester and Danville show similarly high percentages of households without vehicle access.

Table 2.4 - Auto Ownership

	Households with no vehicle available (2000)		# of Current Auto Registrations (2001)	# of Current Auto Registrations Per Person (2001)
	Number	Percent		
Atkinson	19	0.8%	6,634	1.07
Chester	47	3.9%	4,202	1.11
Danville	54	3.8%	3,606	0.90
Derry	451	3.7%	28,281	0.83
Hampstead	68	2.2%	7,797	0.94
Londonderry	103	1.4%	24,180	1.04
Pelham	112	3.1%	11,422	1.05
Plaistow	30	1.0%	7,978	1.03
Salem	442	4.2%	29,867	1.06
Sandown	54	3.2%	4,803	0.93
Windham	50	1.8%	10,923	1.02
REGION	1430	2.9%	139,693	0.98

Source: 2000 Census, NH Department of Safety

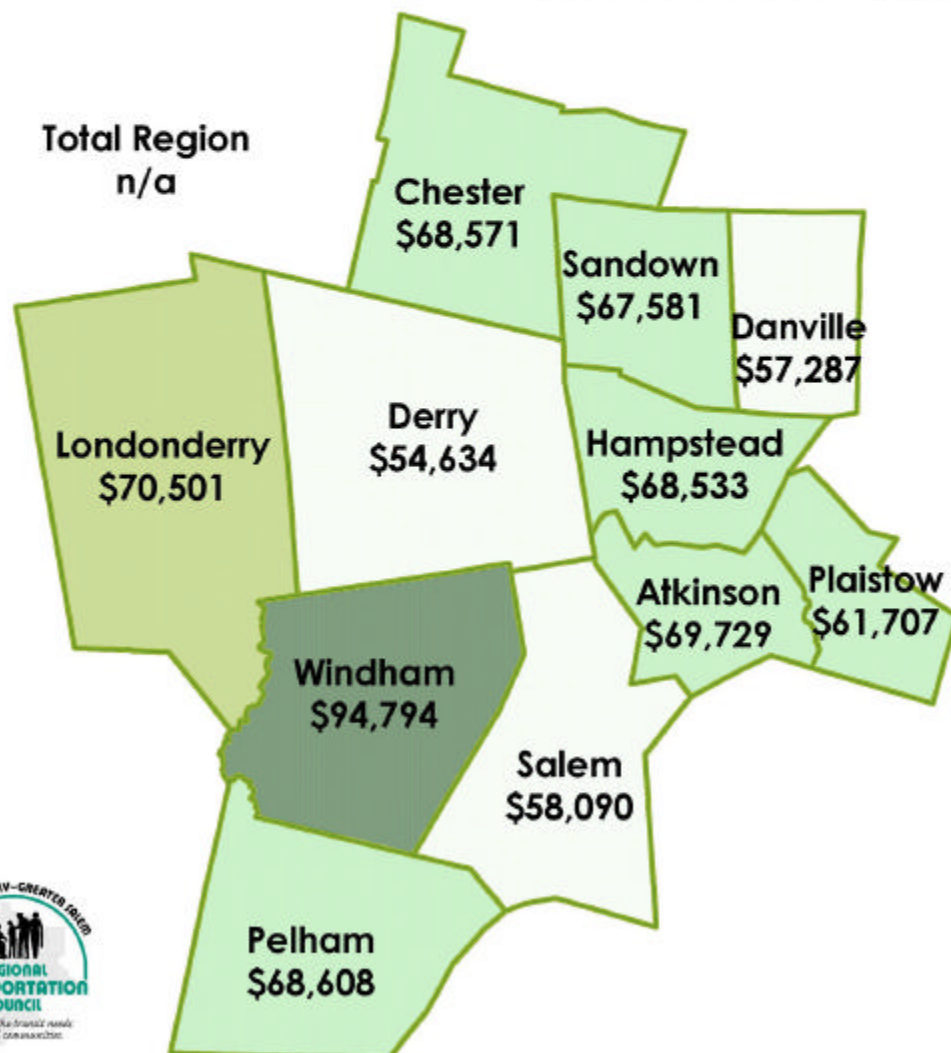
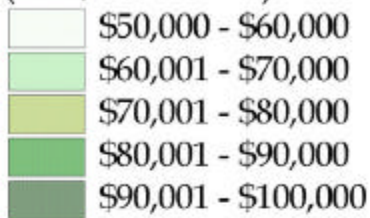
INCOME

Another strong indicator of transit dependency within a region is income, as low-income households are less able to purchase and maintain automobile. **Table 2.5** shows that the more urbanized portions of the region, specifically Derry and Salem, have the lowest median household income levels (\$54,287 and \$58,090 respectively). However, these incomes are still well above that for the state as a whole (\$49,467).

A more specific measure of transit need in the region is the population with income below the federal poverty level. Over 5,000 individuals in the region fell below the poverty level in 2000, with the largest numbers found in Derry (1,564) and Salem (1,155). Female heads of households with no husband present make up 434 of these individuals, while 666 senior citizens fell below the poverty line. While the total percent of individuals in poverty and the percent of female householders in poverty fall below the state average, the percentage of seniors in poverty exceeds the state average in several towns. These include Salem and Plaistow, as well as the smaller towns of Sandown and Danville. As with median income, the percentage of individuals below the poverty level is below that for the state as a whole.

Map 2.4 - Median Household Income

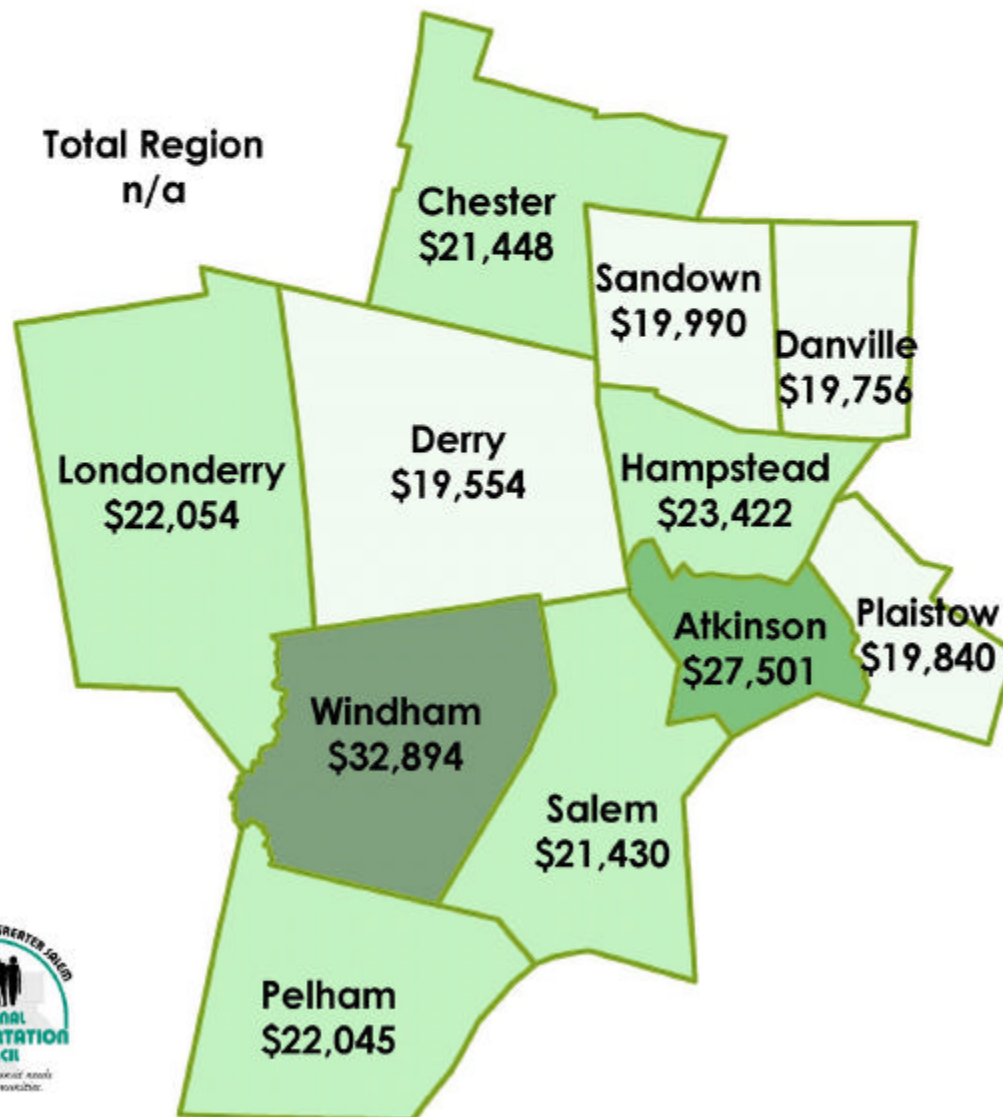
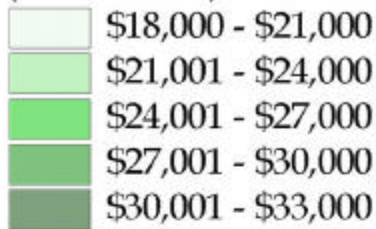
Median Household Income
(1999, US Census)



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Map 2.5 - Per Capita Income

Per Capita Income
(1996, CDFA)



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Table 2.5 – Household Income & Poverty Status

	Median Household Income (1999)	Poverty Status All individuals (2000)		Poverty Status Individuals 65+ (2000)		Poverty Status Female householder, no husband present	
		#	%	#	%	#	%
Atkinson	\$69,729	202	3.3%	15	2.2%	23	16.4%
Chester	\$68,571	188	5.0%	12	4.5%	8	8.8%
Danville	\$57,287	162	4.0%	24	8.4%	18	14.3%
Derry	\$54,634	1,564	4.6%	141	7.1%	182	14.7%
Hampstead	\$68,533	316	3.8%	29	3.7%	32	12.6%
Londonderry	\$70,501	483	2.1%	77	6.3%	16	2.5%
Pelham	\$68,608	331	3.0%	40	4.7%	32	11.0%
Plaistow	\$61,707	245	3.2%	59	7.5%	18	5.5%
Salem	\$58,090	1155	4.1%	237	7.6%	86	11.0%
Sandown	\$67,581	210	4.1%	25	9.2%	12	9.4%
Windham	\$94,794	187	1.8%	7	1.1%	7	5.6%
Region	\$58,150	5,043	4.1%	666	5.95%	434	12.9%
Rockingham	\$58,150	12,347	4.5%	1,699	6.4%	1,085	13.1%
New Hampshire	\$49,467	78,530	6.5%	9,992	7.2%	7,237	17.6%

Source: 2000 Census

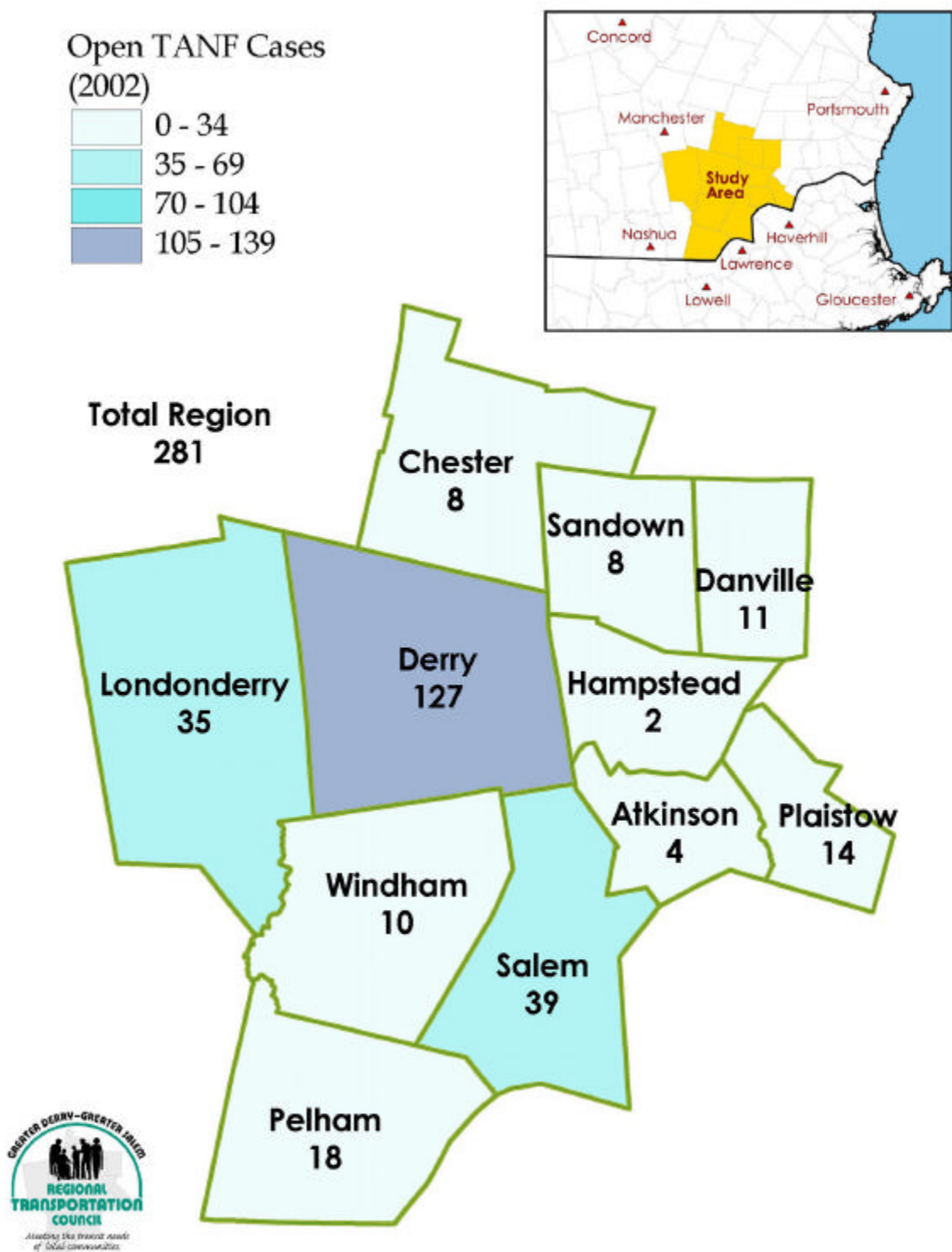
The number of welfare recipients in a region is another indicator of transit need, as recipients of public assistance are likely to face transportation challenges due to lack of a private automobile. The number of welfare recipients in each town, shown in **Table 2.6**, strongly correlates to the median household income level of that town and the number of people below the poverty level. Principally, the two towns with the lowest median household income levels, Derry and Salem, had the highest number of welfare recipients (127 and 39 respectively). These findings point to higher demand for transit in Derry and Salem than other parts of the region, both in terms of income levels and higher population densities that could potentially support transit.

Table 2.6 - TANF Recipients

Families w/TANF Assistance (Welfare Recipients) 2002	
Atkinson	4
Chester	8
Danville	11
Derry	127
Hampstead	2
Londonderry	35
Pelham	18
Plaistow	14
Salem	39
Sandown	8
Windham	10
REGION	276

Source: NHDHHS Division of Family Assistance

Map 2.6 - TANF Clients by Town



Map by Nashua Regional Planning Commission
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DISABILITY

Table 2.8 - Disabled Population

	Disabled Population (2000)	Percent of Total Population (2000)
Atkinson	134	2%
Chester	59	2%
Danville	1	0%
Derry	704	2%
Hampstead	1	0%
Londonderry	313	1%
Pelham	176	2%
Plaistow	137	2%
Salem	588	2%
Sandown	52	1%
Windham	115	1%
REGION	2,280	2%

Source: 2000 Census

Disabled persons typically rely on a higher number of transit trips, since many persons' disabilities deny them of the ability to operate an automobile. In addition, many disabled individuals require transit vehicles with specialized equipment and many require "door-to-door" service with special assistance. The two most urbanized areas in the region, Derry and Salem, had the highest number of disabled residents (704 and 588 respectively). In addition, Londonderry also had a significant number of disabled residents (313).. These portions of the region are more likely to need transit service for disabled persons and more likely to need specialized "door-to-door" services.

REGIONAL TRANSIT NEED ESTIMATE

Table 2.9 shows calculations of transit need in the Derry Salem region based on a model developed by the Community Transportation Association of America. Based on assumption that 0.5% of the total population will be regular transit riders, the models estimates a total transit need for the region of over 460,000 trips/year. **The need for trips serving transit dependent populations is calculated at 124,132, or a little over twice the current level of service in the region.** This calculation also does not include the need among the disabled population, which would push estimates higher. These estimates support the position that the need for transit service in the Derry-Salem region is substantially greater than what is available under the current uncoordinated system.

Table 2.9 - Estimate of Regional Transit Need

Socioeconomic Characteristic	GD/S REGION
Households	50,094
Total Population	142,172
Elderly (60+)	16,051
Non Elderly Low Income	4,352
Workforce	81,704
General Public Transit Need 1 (trips/year) ¹	478,648
General Public Transit Need 2 (trips/year) ²	462,059
Transit Dependent Need (trips/year) ³	124,132
Work Trips Need (trips/year) ⁴	424,861

1=(# of Households) * (7.35 trips/day per transit using household) * (0.5% of households) * (260 days/year)

2=((Population*2.5 trips/day per transit rider)* (0.5% of population riding transit regularly) * (260 days/year)

3=(Elderly pop + Non-elderly low income)*0.15*1.04*0.15*260 days/year

4=(Total Workforce) * (1% of workforce commuting via transit) * (2 trips/day) * (260 days/year)

TRIP ORIGINS & DESTINATIONS

Identifying the purpose of transit trips, as well as major trip origin and destination points, is a key aspect of evaluating transit need in the region. The study approached this in two ways: 1) identifying origin, destination, and trip purpose for actual trips provided by agencies; and 2) identifying likely trip generators in the region, including major employers, child care sites, publicly assisted multifamily housing, senior and community centers, health care providers, and retail centers.

Two Week Sample of Trip Origins, Destinations, and Purposes

The first approach was gathering information from provider agencies on the origin, destination, and trip purpose of rides provided during a two-week sample period. Providers were asked to log all trips requested during between February 18 and March 1, 2002. Figure 2.10 shows the purpose of trips provided during the sample period. The largest share of trips was destined for senior centers, followed by medical appointments and shopping. These figures reflect the focus of existing services on the needs of elderly and disabled citizens, and the lack of employment transportation. While senior centers represent an important social environment for the elderly, the trip figures also point to the limited availability of transportation for purposes other than basic needs of meals, medical care, and shopping.

Table 2.10 - Trip Purpose

Type of Trip	Number of Riders	Percent of Total
Senior/Care Center	325	40.7%
Medical	245	30.7%
Shopping/Restaurant	171	21.4%
Unknown	33	4.1%
School	20	2.5%
Institution/Gov't	3	0.4%
Recreational	2	0.3%
TOTAL	799	100%

Source: Provider trip logs (data missing for several providers)

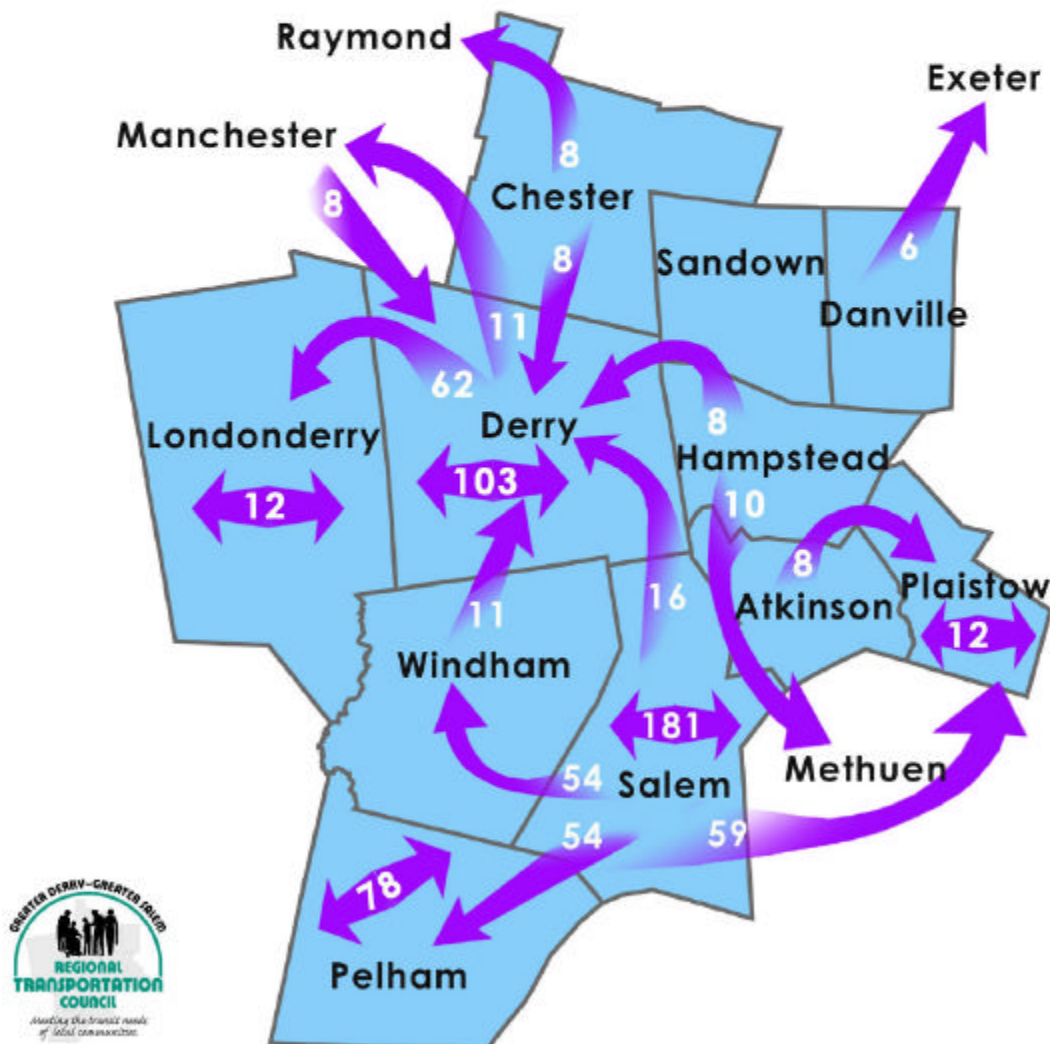
Table 2.11 on the following page shows the origins and destinations of trips made by reporting providers during the two-week sample period. Numbers are heavily influenced by the supply of service available by town. While Derry has the largest population in the study area, it shows less than half the level of trip activity of Salem, which has a strong senior van program in addition to service from STS and Caregiver organizations. This is reflected in the number of trips (181) provided within Salem. Derry shows the next highest level of trip activity, followed by Pelham, which is similarly served by a senior van program.

Table 2.11 - Trip Origins and Destinations by Town

Origin	Number of Riders	Destination	Number of Riders
Atkinson	9	Salem	1
		Plaistow	8
Chester	17	Raymond	8
		Derry	8
		Londonderry	1
Danville	22	Exeter	6
		Salem	1
		Windham	3
		unknown	12
Derry	177	Derry	103
		Hooksett	1
		Londonderry	62
		Manchester	11
Hampstead	25	Derry	8
		Hampstead	2
		Methuen, MA	10
		Plaistow	5
Londonderry	26	Derry	5
		Londonderry	12
		Nashua	5
		Pelham	2
		Windham	2
Manchester	8	Derry	8
Newburyport	1	Salem	1
Newton, MA	9	Plaistow	9
Pelham	79	Lowell	1
		Pelham	78
		Salem	27
Plaistow	19	Derry	3
		Nashua	1
		Plaistow	12
		Salem	27
Salem	379	Derry	16
		Lawrence, MA	3
		Londonderry	1
		Manchester	2
		Methuen, MA	7
		North Andover, MA	2
		Plaistow	5
		Salem	181
		Windham	54
Sandown	5	Londonderry	1
		unknown	4
Windham	23	Derry	11
		Londonderry	1
		Manchester	1
		Nashua	5
		Salem	27
		Windham	4
TOTAL	799		799

Map 2.7 - Trip Patterns from "Snapshot" Origin-Destination Survey

Origin, Destination and
Number of Transit Riders
(more than 5 trips)

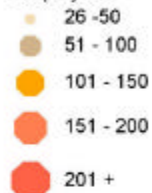


Map by Nashua Regional Planning Commission
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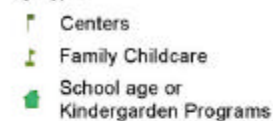
Map 2.8 - Major Trip Origins and Destinations in Region

Major Employers, Childcare, Assisted Housing and Hospitals in the GDGSRTC Area

Major Employers
by Number of
Employees



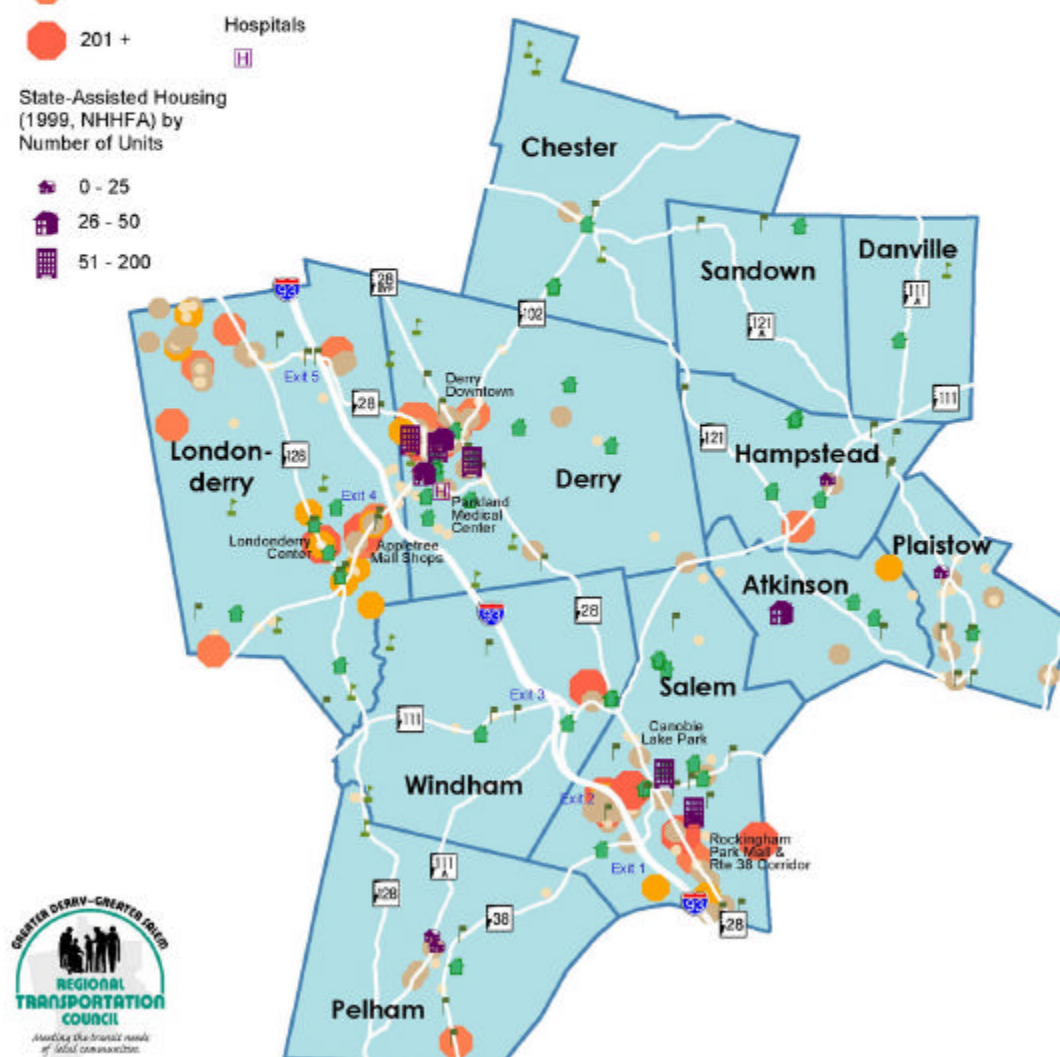
Childcare Providers
(10 or more capacity)
by Type



Hospitals



State-Assisted Housing
(1999, NHHFA) by
Number of Units



Map by Nashua Regional Planning Commission
Printed 3/02. Project: j:\gis\av\projects\otherproj\transpo\gdgsrtc.apr

Major Trip Generators in Study Area

Map 2.8 on the previous page shows the location of major trip generator sites at a macro regional level. These include major employers, child care sites, publicly assisted multifamily housing, senior and community centers, health care providers, and retail centers. This visual analysis highlights the concentrations of employment in downtown Salem and Derry, with additional employment clusters off of Exits 5 and 4 in Londonderry. While Salem has some assisted multi-family housing, the largest concentration of such housing in the region is in Derry. Outside of these three largest communities there are few large employment and service centers, and those that are present tend to be widely dispersed, making them difficult to serve with traditional fixed route transit.

These trip generator sites are shown at a detailed level in Chapter 5 - Fixed Route Service Options, along with a discussion of the implications of serving them with transit. Maps 5.1 and 5.2 depict proposed fixed transit routes in relation to trip generator sites. A database with names and addresses of employers and other trip generators is included as Appendix D.

CONCLUSION

The Derry-Salem region as a whole is not economically challenged. Rockingham County is in fact one of the wealthiest areas of the state. However, every region has populations who require transportation assistance, whether they be elderly, disabled, lower income, or simply too young to drive. The need for public transportation in the region has been recognized for years. Lack of public transportation is a very real barrier to accessing adequate health care. It is a barrier to accessing jobs for many disabled and low income residents; and it is a barrier to full participation in the life of the community for all of these groups, whether that means participation in recreational or social events, or participation in town meeting.

Trip purpose data from the origin-destination sample point to the limited nature of the transit service that is available in the region. However, the towns of the region have yet to take effective, coordinated action to address the need. As the growth of elderly and youth populations outpaces the rest of the state, and the economic downturn subsequent to the 2000 Census has put more families on the edge, the need for transit service in the region is greater than ever. The dispersed nature of development through much of the region creates much of the difficulty of meeting this need, but areas far more sparsely populated are effectively served by transit elsewhere in the country. A combination of demand response and fixed route service will allow a cost effective approach to meeting community need for transit access.

Chapter 3. Profile of Existing Transit Service in the Region

INTRODUCTION

Project staff surveyed seventeen transportation service providers in the project area to gather information on existing services and identify opportunities for coordination and service expansion. A copy of the survey instrument is included as Appendix C. In most cases the survey was administered in person in an interview format, though in several instances agency staff requested that a copy be faxed to them to fill out as they had time available. Of the seventeen agencies originally surveyed, one expressed no interest in study participation. Since the original survey, two additional agencies were identified and approached for information.

The survey asked a range of questions addressing days and hours of operation; service capacity in terms of vehicle numbers and characteristics such as lift equipment and radios; numbers and types of clients served; annual trips and miles logged; size and training of staff; and agency funding levels and sources.

AGENCIES SURVEYED

The nineteen service providers operating in the region interviewed for the study include a range of nonprofit health and human service agencies, two assisted living facilities, four town operated senior transportation programs, two county agencies, and Special Transit Service – the only provider whose primary mission is transportation. Descriptions of each of the agencies are given below. Survey responses are summarized in **Tables 3.1 - 3.8** at the end of the chapter.

American Cancer Society

The American Cancer Society is a private, non-profit organization providing rides to treatment for cancer patients in western part of Rockingham County. ACS does not own and operate vehicles, but rather coordinates volunteers who drive patients in private vehicles. Services are offered Monday-Friday, 9:00am-5:00pm.

Atkinson Senior Van

The Atkinson Senior Van is operated by the Atkinson Police Department. Rides are provided by police officers in one handicapped accessible van as well as a sedan. Service is offered seven days a week, from 8:00am-4:00pm, to senior citizens in Atkinson.

CLM Behavioral Health

CLM Behavioral Health provides a range of behavioral and mental health services, psychiatric treatment, acute care, emergency intervention, and family support services through centers in Salem, Derry, and Windham. Their service area includes all of the study area towns except Londonderry and Chester. Rides to clients are provided using two fifteen passenger vans with paid, full-time drivers. Rides for outpatient services are limited to 8:30 am -5:00 pm Monday-Friday, though emergency transportation is available outside of these hours.

Community Caregivers of Greater Derry

This non-profit organization provides supportive services, including transportation, to elderly and disabled residents located in the six-town area of Derry, Londonderry, Chester, Sandown, Danville, and Hampstead. Transportation services are provided by volunteers using their own personal vehicles, so vehicles are generally not handicapped accessible. Volunteers are reimbursed for mileage expenses through the Rockingham Senior Volunteer Program.

Greater Salem Caregivers

The Greater Salem Caregivers is a non-profit agency that provides supportive services, including transportation, mainly to elderly residents located in the towns of Pelham, Salem, Atkinson, and Plaistow. Rides are also provided to disabled residents, though these account for less than 10% of trips. Transportation services are provided by volunteers, who use their own personal vehicles, so vehicles are generally not lift equipped. Funding is provided through the member towns, the United Way, and donations.

Granite State Independent Living

Granite State Independent Living is a non-profit organization whose staff provide a range of services, including evaluation, skills training and on-going support to enable eligible consumers to pursue independent lives. Four core service areas include information and referral; peer support and counseling; skills training; and individual and systems advocacy. GSIL maintains five wheelchair accessible vans, which provide transportation annually to meetings and social activities.

Greystone Farm at Salem

Greystone Farm is a private, 65 unit senior assisted living facility in Salem. Greystone Farm operates one handicapped accessible vehicle, which is utilized primarily for group outings and trips. The van is not used for medical appointments. Service is available Monday-Saturday during daytime hours.

Kimi Nichols Center

The Kimi Nichols Center is a private, non-profit human service center targeting the needs of disabled citizens in the towns of Londonderry, Derry, Salem, Windham, Atkinson, Hampstead, Chester, Sandown, Danville, and Haverhill Massachusetts. Services include day habilitation, and communications and vocational training for adults with serious developmental disabilities. KNC operates a fleet of 8 vehicles to pick up clients and bring them to the service center, and return them home. This provider is an identified recipient of FTA Section 5310 transportation funding (Elderly & Disabled Capital Grants Program) discussed in Chapter 5.

Lamprey Health Care Senior Transportation

Lamprey Health Care Senior provides transportation for elderly and disabled residents of Rockingham County and parts of Strafford County. The program offers weekly service on

Tuesdays to the towns of Hampstead, Atkinson, Plaistow, Danville, and Sandown for shopping and medical appointments; and similar service on Wednesdays to Derry, Londonderry, and Windham. Rides can also be scheduled by reservation at least a week in advance. Clients are encouraged to call about a ride in advance of scheduling appointments, as the program also offers the service of appointment scheduling to better coordinate trips. The program operates a fleet of 7 buses. All of the buses are lift-equipped, and have the capacity for two wheelchairs and 10-24 passengers. Lamprey is a recipient of FTA Section 5310 transportation funding.

Pelham Senior Van

The Pelham Senior Van operates Tuesday through Friday through the Pelham Senior Center. Residents of the Town of Pelham have access to transportation to and from the Senior Center, which provides activities and lunches between the hours of 9:30AM and 1:30PM. Additionally, the 22 passenger, lift-equipped senior van provides transportation on Monday, twice a month, for social trips that include lunch and movie days and local grocery shopping. This provider is an identified recipient of FTA Section 5310 transportation funding.

Rockingham Adult Medical Daycare

Rockingham Adult Medical Daycare is operated by Rockingham County. Transportation services are available primarily to transport clients to and from the adult daycare center in Brentwood. Service is offered three days per week, on Monday, Wednesday, and Friday. The center uses two 14 passenger lift equipped vans on four van routes picking clients up in the morning and returning them home in the evening. Three of the van routes service the eastern portion of the county, while one of them operates in the study area, serving clients in Plaistow, Danville, and Fremont. When not in use for medical daycare transportation, the county operated vehicles are often utilized by other County Departments.

Rockingham Nutrition Meals on Wheels

Rockingham Nutrition Program's Meals on Wheels program has a primary mission of delivering meals to elderly and handicapped clients throughout the county, and transporting elderly residents to meal sites. The meals on wheels program directly provides transportation to meal sites in Derry and Plaistow, and provides limited support for meal transportation to the Salem Senior Center. The Derry MOW vehicle is an 11 passenger van that also provides limited rides to grocery stores in the morning when vehicles are not otherwise in use for delivering meals. A seven passenger minivan is vehicle is based at the Vic Geary Senior Center in Plaistow.

Rockingham Retired Senior Volunteer Program (RSVP)

The Retired Senior Volunteer Program (RSVP) for Rockingham County operates out of the Portsmouth Housing Authority. RSVP staff take calls for ride requests, and in many cases refer requests to other providers in the region. If other services are not an option, RSVP staff arrange for retired volunteers to provide rides in private vehicles. In the study area, RSVP works through the Derry and Salem Caregivers organizations, providing mileage reimbursement for senior volunteer drivers.

Salem Senior Center

The Salem Senior Center is open daily from 9AM to 5PM to provide services and activities for residents of the Salem community. A Senior Shuttle provides free transportation to and from the Center, medical appointments and grocery shopping. Rides are booked through the Center, minimally with one-day advance notice. Rides are provided on an 18 passenger lift equipped minibus. The Senior Center also maintains a 16 passenger non-lift-equipped bus as a backup vehicle. They are a recipient of FTA Section 5310 transportation funding.

Silverthorne Adult Day Care

Silverthorne Adult Day Care provides medical monitoring, social activities and local transportation services to residents in Salem and surrounding towns. Service is provided on weekdays from 7:00am-9:00am, and 3:00pm-5:00pm. Transportation services are provided using two lift equipped vehicles: a 10 passenger van and a 12 passenger mini-bus. Most rides are daily, repetitive, subscription trips, booked during initial client intake interviews.

Special Transit Service, Inc.

Special Transit Service (STS) is a non-profit human service agency whose primary function is to provide and coordinate special needs transportation. The agency is a division of Easter Seals. STS provides specially designed transportation service on a contractual basis to human service agencies and other organizations in the Greater Manchester and Derry area. Specialized transportation service is also available to the general public. Current organizations that utilize STS for service are the State of NH DEAS, the Manchester School system, the Londonderry School system, other school districts, NH Medicaid, Catholic Medical Center, Manchester Community Health Center, NH Vocational Rehab, NH Area Agencies, Granite State Independent Living Foundation, Easter Seals, Community Health Services of Greater Derry (CHS), the Greater Derry Greater Salem Regional Transportation Council (RTC), the Manchester Housing Authority, the Greater Manchester Mental Health Center, the general public and other organizations and institutions. Fees for service are determined when service is requested. STS is an FTA Section 5310 funding recipient. Their fleet consists of 33 school buses, 29 multi purpose vans, and 14 lift equipped vans, 4 lift equipped buses, 2 buses, 3 cars and 2 trucks. STS currently has two lift-equipped vans providing demand response under contract with the RTC and CHS serving the Greater Derry-Salem area. Any elderly or disabled person can request service from STS.

Town of Windham

The Town of Windham owns and operates one handicapped accessible van, which utilizes volunteer drivers to provide medically related transportation for town residents. In addition, a group shopping trip is provided every Wednesday to Wal-Mart in Salem. Services are scheduled by contacting the Town Hall. Seniors and disabled residents are the primary populations using the van service.

The Upper Room Family Resource Center

The Upper Room offers a range of support services for families and youth in the Greater Derry area. Programs include youth after school programs, education and peer support for pregnant and parenting teens, anger management classes, and home visitation programs for families in need of support. The Upper Room maintains one fifteen passenger van that is used to transport middle school students as part of the center's Youth in Action (YIA) program. The van is used from 1:30-6:00 pm daily and is driven by the YIA program director.

Windham Terrace

Windham Terrace is a private, senior assisted living facility in Windham. Transportation services including medical appointments, shopping, and recreational outings are provided to residents Monday-Friday from 8:00am-4:30pm in a lift equipped twelve passenger van as well as a sedan.

SERVICE PROFILE

Most of the providers surveyed offer demand response service. There is no fixed route transit service connecting points within the region, though limited intercity bus service is available connecting points in the study area to Boston during commute hours. The Greater Derry Greater Salem region is the only urbanized area in the State of New Hampshire lacking such service. Six of the providers responding to the survey do offer some form of deviated fixed route service, typically in the form of a weekly shopping run, or a daily pick-up route to bring clients to a service center.

Table 3.1, at the end of this chapter, shows that service is generally limited to weekdays during normal agency business hours. Only four agencies begin service prior to 8:00 am, with the earliest starting at 6:00am. A similar number extend service beyond 5:00pm, with the latest-running service stopping at 6:30pm. One agency indicated that it has provided evening service in unusual circumstances, but this was clearly an exception. Two providers offered Saturday service, and one operated on Sunday. Extending the availability of service to include evenings and weekends was a goal indicated by several providers, and was identified as an objective by the Project Advisory Committee, as discussed in Chapter 1.

The responding providers have a combined fleet of 122 vehicles, with approximately 25 of them operating in the study area. The bulk of the additional vehicles are operated by Special Transit Service in the Manchester area (84); with 6 additional vehicles operated by Lamprey Health Care in the Seacoast region. The 25 vehicles operating in the Derry-Salem study area include: 15 handicapped accessible vans; 6 non-handicapped accessible vans with a total seating capacity of 62; four buses, and five smaller vehicles. Almost two thirds of the vehicles operated by the surveyed providers are not on the road during the providers' full service periods. **Table 3.8**, at the end of this chapter, shows details on 23 vehicles operated by provider agencies who continue to express interest in participating in a coordinated system as of December 2002.

Almost all of the providers surveyed focus on elderly clients, with **Table 3.1** showing that twelve respondents indicating that the elderly make up over 90% of their client base. Seven providers indicate carrying disabled clients, though only in three cases did these make up over 7% of the clientele: Kimi Nichols Center (100% disabled), Granite State Independent Living (80%), and the Rockingham Nutrition Meals on Wheels program (25%). School contracts make up 60% of Special Transit Service trip volume, including a contract for special education transportation with the Londonderry school system. Very limited service is currently available to low income residents in the region. Very limited service is currently available to low income residents in the region, though the two vans operated by STS are available for use by low income residents. Also, Rockingham Community Action, the CAP agency for the region, runs a program called Wheels to Work which provides used cars for low income individuals to meet their work transportation needs. However, the CAP does not provide demand response service for TANF or other low income clients. This is a key underserved element of the transit dependent population in the region. It is also a population for which transportation funding is available, which could play a key role in supporting a coordinated system.

Current Staffing & Operations Structures

Training provided to drivers varied substantially across providers, as depicted in **Table 3.3**. Five providers provided comprehensive training in first aid, CPR, defensive driving, passenger assistance, preventive maintenance, and pre-trip inspection. Most agencies provided training in defensive driving (11) passenger assistance (10), pre-trip vehicle inspection (10), and preventive maintenance (9). First aid and CPR training were less common, included in driver training by six and eight providers respective. Training was particularly limited among the agencies relying on volunteer drivers. Standardizing and expanding access to training for all drivers will be a key element of a coordinated system.

Approximately half of the respondents indicated that their vehicles carry on-board radios for communication with a dispatcher, as shown on **Table 3.2**. Several others indicated use of cell phones for vehicle communication. This existing use of radios will ease a transition toward a coordinated dispatch system.

With regard to maintenance, **Table 3.2** shows that seven respondents indicated that they currently handle maintenance in-house. Most of these respondents are town or county programs, with the additions of Silverthorne and STS. Six providers contract out for maintenance, while the remaining respondents rely on volunteers driving private vehicles, and do not deal directly with vehicle maintenance.

Funding & Trip Volume

An incomplete estimate of the combined budget for transportation services in the region is shown in **Table 3.4** as \$467,392. This excludes budget figures from the Greater Derry Caregivers, the Towns of Windham and Atkinson, the American Cancer Society, RSVP, and Greystone Farm. One funding source that is not currently tapped by most providers is fare revenue. Only four respondents indicated either charging set fares or requesting specific donation amounts.

The total annual number of one-way trips provided within the study area was upwards of 55,300, which does not include totals for RSVP, Windham, Atkinson, Greystone, the Upper Room, or CLM. This is equivalent to 1065 trips/week, or 213 trips/day.

While information on the full cost of transportation service is not complete for every provider, estimates of cost per trip range from a low of \$2.62 to a high of \$38.48, as shown in **Table 3.4**. These reflect the types of trips provided by each agency. Short, regularly scheduled senior center trips tend to be less expensive; while longer demand response trips tend to be more expensive. The average costs per mile of service across the fleet equals \$1.61.

Efficiency

To assess how efficiently vehicles are being used, one common measure is the ratio of daily one-way passenger trips to fleet seating capacity. The average demand-response paratransit system with 50% of its trips being group ride repetitive trips will have a daily passenger trip/fleet seating capacity ratio of between 1.25 and 1.5 (ATC Paratransit). Across the system currently, the trip/fleet seating capacity ratio is approximately 0.70, showing significant room for improvement. As few if any of the individual providers offer an equal balance of subscription and non-subscription trips, this measure is not useful for evaluating individual providers. **Table 3.7** identifies seven vehicles with predictable blocks of idle time during the week totaling up to 120 hours. Much of this idle time is due to lack of funding for drivers. Securing funds to put these vans on the road full time will be a key step optimizing use of existing resources.

Use of deviated fixed-route service by Lamprey Health Care, Rockingham Adult Medical Daycare, Kimi Nichols Center, and the Town of Windham appears to be an effective approach to increasing the number of passengers per trip, as riders schedule flexible trips such as shopping around a pre-planned schedule. This approach can be more problematic for medical appointments, as timing is more critical than for shopping and available times at a doctor's office may not correspond to vehicle schedules. Lamprey has addressed this problem in part by not only scheduling rides for clients, but also scheduling their medical appointments - balancing clients needs and available ride times. Expansion of deviated fixed route service in some areas could be an interim step toward an eventual fixed route system in the region.

Interest in Coordination

Providers generally perceived that their transportation needs were being well met, with ten indicating their needs are being met "somewhat well" and six indicating transportation needs are "very well" met. Nonetheless, interest in some form of coordination was high, as illustrated in **Table 3.5**. Twelve of the sixteen responding agencies indicated a willingness to participate in a coordinated system. Two providers indicated that they were not interested in coordination, while two others were uncertain. Beyond this general interest, smaller numbers indicated interest in more specific aspects of coordination. Seven agencies expressed a willingness to coordinate client visits, and similar numbers expressed an interest in coordinating vehicle schedules and cooperative planning. Five respondents were interested in both coordinating client visits and coordinating vehicle schedules. Four agencies expressed an interest in centralized dispatching.

SUMMARY OF FINDINGS FROM PROVIDER SURVEYS

- ◆ The providers have a combined total of 122 vehicles, with about 25 of them operating mainly in this region. Total seating capacity for the full fleet is 1316, with about 295 seats in vehicles operating mainly in the region.
- ◆ The vast bulk of the service available in the region is demand response (63%, or 13 providers), while six providers offer some form of deviated fixed route service. Approximately 50% of trips provided in the system are regularly scheduled subscription trips, though the ratio varies widely by provider, with some providers making virtually all subscription trips (Silverthorne) and others making few if any (STS).
- ◆ Almost two thirds (63%) of the vehicles operated by the surveyed providers are not on the road during the providers' full service periods. This is largely due to use of part time drivers. At least seven vehicles are unused for large, predictable blocks of time during the week. If funding for driver time can be secured, and use of these vehicles can be negotiated, up to 120 hours of additional van time could be available per week.
- ◆ Service is generally limited to weekdays between 7:00am and 6:00pm. Many providers are limited to 9:00am-5:00pm. Late service is generally not available, nor is weekend service.
- ◆ Total one-way trips provided within the study area were approximately 54,390, which does not include totals for RSVP or Greystone. This equates to 1045 trips/week, or 209 trips/day.
- ◆ The daily passenger trip/fleet seating capacity ratio across the system is 0.71. This compares to a range of 1.25-1.5 for an average demand-response paratransit system with 50% of its trips being group ride repetitive, and shows significant room for improvement through coordination.
- ◆ 75% of providers indicated that demand for rides has increased in the past several years.
- ◆ Most providers do not have a clear picture of exactly how much they spend on transportation services. Many vehicles are driven on a part time basis by highly qualified staff such as case workers, therapists, nurses, and police officers. Their time is typically not considered as part of the transportation budgets, and it is not a cost effective use of these staff. Many providers are also unclear of their capital vehicle costs and insurance.
- ◆ Securing resources necessary to maintain their operations is a significant concern for most of the service providers. This includes securing cash funding, as well as recruiting and retaining volunteer drivers.

- ◆ While some providers have well defined long-range goals, for many organizations these are unclear and consist mainly of continuing to provide services to meet the needs of their clients. Other common goals included:
 - Expand recruitment of volunteers
 - Generally expand service availability
 - Improve efficiency/cost-effectiveness
 - Replace aging vehicles

- ◆ The majority of survey respondents (13 out of 17) indicated an interest in some form of coordination. Two providers indicated that they were not interested in coordination (the towns of Windham and Atkinson), and two providers expressed that they may be interested in participation (Derry Caregivers and Silverthorne Adult Day Care).

- ◆ Responding providers noted a range of concerns about potential barriers to service coordination. Among these were:
 - General concerns about how scheduling would work, would it be as convenient for current clients.
 - Liability issues for volunteer drivers, county vehicles, privately owned vehicles or clients of private entities.
 - Concerns over transporting different client groups (mixing elderly with younger low income, kids, veterans).
 - Costs of establishing a centralized brokerage and loss of agency funding control.
 - Client response to an unfamiliar provider.

Table 3.1 - Service and Vehicle Profile by Transportation Provider

Provider	Hours	Idle Time	Vehicles	Access Vehicles	Total Seat Capacity	Elderly Clients	Disabled Clients	Other Client Groups
American Cancer Society	M-F 9:00-5:00	NA	NA	NA	NA	100%		100% cancer patients
Atkinson Senior Van	7 Days 8:00-4:00	50%	2	1	9	100%		
Caregivers - Derry	M-F 9:00-3:00	NA	NA	NA	NA	95%	5%	
Caregivers - Salem	M-F 9:00-3:00	NA	NA	NA	NA	93%	7%	
Granite State Independent Living	M-F 8:00-5:00	40-50%	7 (tot) 1 (reg)	7	32	5%	80%	5% low-income 10% group mtgs.
Greystone Farm	Mon-Sat Daytime		1	1	12			
Kimi Nichols Center	M-F 8:00-4:30	<25%	8	5	41		100%	
Lamprey Health Care Senior Transportation	M-F 7:00-6:00	10-20%	8 (tot) 3 (reg)	7	124	95%	3%	2% general public
Pelham Senior Van	M-F 9:30-1:30	50%	1	1	22	100%		
Rockingham Adult Medical Daycare	M-W-F 6:30-11:30 1:00-6:30	40%+ Tu-Th	2	2	28	100%		
Rockingham Nutrition Meals on Wheels	Derry 5hrs Others 4hrs	10%	4 (tot) 2 (reg)	0	32	100%	25%	
Rockingham RSVP	M-F 8:30-4:30	NA	NA	NA	NA	100%		
Salem Senior Center	7 Days 8:30-4:00	15-20%	2	1	18	98%	2%	
Silverthorne	M-F 7-9, 3-5	50%	2	2	22	100%		
Special Transit Service (STS)	M-F 6:00-5:30	0%	91 (tot) 2 (reg)	30	965	40%		60% school contracts
Town of Windham	M-F 9:00-5:00	20-25%	1	1	15	98%		
Windham Terrace	M-F 8:00-4:30	50%	2	1	14	100%	2%	

Table 3.2 -Staffing, Communications, Maintenance, Fares, and Needs Met by Transportation Provider

Provider	FTE Drivers	FTE Adm/sched	Volunteers	Central Dispatch	On-Board Radio	Maintenance	Needs Met	Charges Fare
American Cancer Society	0.0	0.05	All Drivers	Yes	No	NA	Somewhat Well	No
Atkinson Senior Van	0.2	0.2		Yes	Yes	In House	Very Well	No
Caregivers - Derry	0.0	1.0	All Drivers	No	No	NA	Very Well	No
Caregivers - Salem	0.0	1.2	All Drivers	Yes	No	NA	Somewhat Well	No
Granite State Independent Living	5.0 statewide	1.0 statewide		Yes	Yes	Contract	Somewhat Well	No
Greystone Farm	NA	NA		Yes	No	Contract	Very Well	No
Kimi Nichols Center	NA	NA		Yes	No-Cell	Kinney's Garage	Somewhat Well	No
Lamprey Health Care Senior Transportation	0.8 in region	0.3 in region	3	Yes	Yes	Contract	Somewhat Well	\$1.50 donation
Pelham Senior Van	0.55	0.125		Yes	No-Cell	Northern Bus & Woody's	Sr Ctr: OK Eld Pop - No	No
Rockingham Adult Medical Daycare	0.55	0.1		Yes	Yes	County	Somewhat Well	\$3.75min \$8.00max
Rockingham Nutrition Meals on Wheels	1.0	0.4		No	No	In House	Somewhat Well	\$0.25 OW \$1.00 shoppg
Rockingham RSVP	0.0	1.0	All Drivers	Yes	No	NA	Somewhat Well	No
Salem Senior Center	0.875	0.2		Yes	Yes	In House	Very Well	No
Silverthorne	1.0	0.05		Yes	Yes	In House	Somewhat Well	\$8 0-3mi \$18 10-15
Special Transit Service (STS)	2.0 in region	0.5 in region		Yes	Yes	In House	Very Well	(donations /contracts)
Town of Windham	NA	NA		Yes	Yes	In House	Somewhat Well	No
Windham Terrace	0.4	0.05		Yes	No	Contract	Very Well	

Table 3.3 - Types of Driver Training Conducted by Transportation Providers (From Survey)

Provider	First Aid	CPR	Commercial License	Defensive Driving	Passenger Assistance	Preventive Maintenance	Pre-Trip Inspection
American Cancer Society							
Atkinson Senior Van		Yes					
Caregivers - Derry				Yes	Yes		
Caregivers - Salem		Yes		Yes			
Granite State Independent Living				Yes	Yes	Yes	Yes
Greystone Farm	Yes	Yes	Yes		Yes	Yes	Yes
Kimi Nichols Center	Yes	Yes		Yes	Yes	Yes	Yes
Lamprey Health Care Senior Transportation	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pelham Senior Van		Yes	Yes		Yes		
Rockingham Adult Medical Daycare				Yes	Yes	Yes	Yes
Rockingham Nutrition Meals on Wheels				Yes			
Rockingham RSVP							
Salem Senior Center	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Silverthorne				Yes	Yes	Yes	Yes
Special Transit Service (STS)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Town of Windham							Yes
Windham Terrace	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table 3.4 -Operating Cost Calculations (From Survey)

Provider	Annual Budget	Trips/ Year	% of Total Trips	Cost/Trip	Operating Hours/Year	Trips/ Hour	Trips/Day	Annual Mileage	Cost/mile
American Cancer Society		98	0.2%		2,080	0.05	0.4		
Caregivers - Derry		2,060	3.7%		2,860	0.72	7.9	19,500	
Caregivers - Salem	\$17,500	1,562	2.8%	\$11.20	1,560	1.00	6.0	25,025	\$0.70
Granite State Independent Living	\$73,006	1,897	3.4%	\$38.48	2,340	0.81	7.3	72,752	\$1.00
Kimi Nichols Center	\$80,000	16,000	28.9%	\$5.00	2,210	7.24	61.5	115,000	\$0.70
Lamprey Health Care Senior Transportation	\$48,563	4,784	8.6%	\$10.15	2,860	1.67	18.4	25,000	\$1.94
Pelham Senior Van	\$11,152	4,254	7.7%	\$2.62	1,248	3.41	16.4	11,462	\$0.97
Rockingham Adult Medical Daycare	\$31,940	4,056	7.3%	\$7.87	1,638	2.48	15.6	30,000	\$1.06
Rockingham Nutrition MoW	\$25,697	4,668	8.4%	\$5.50	1,300	3.59	18.0	17,000	\$1.51
Salem Senior Center	\$54,450	3,776	6.8%	\$14.42	2,730	1.38	14.5	13,000	\$4.19
Silverthorne	\$34,200	6,240	11.3%	\$5.48	1,040	6.00	24.0	16,000	\$2.14
STS - In Region	\$110,150	5,477	9.9%	\$20.11	2,990	1.83	21.1	80,407	\$1.37
Windham Terrace	\$10,882	520	0.9%	\$20.93	2,210	0.24	2.0	5,000	\$2.18
Totals	\$497,540	55,392	100%	\$12.89	27,066	30.42	213.0	430,146	\$1.61

Table 3.5 - Provider Interest in Various Aspects of Coordination

Provider	Interested in Coordination of Some Sort	Cooperative Planning	Joint Purchase of Gas and/or Maintenance	Coordinating Client Visits	Coordinating Vehicle Schedules	Centralized Dispatching	Joint Garage/ Office Space
American Cancer Society	Yes	Yes					
Atkinson Senior Van	No						
Caregivers - Derry	Maybe	Yes					
Caregivers - Salem	Yes		Yes	Yes	Yes	Yes	
Granite State Independent Living	Yes	Yes		Yes			
Greystone Farm	Yes			Yes			
Kimi Nichols Center	Yes	Yes	Yes		Yes		
Lamprey Health Care Senior Transportation	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Pelham Senior Van	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Rockingham Adult Medical Daycare	Yes	Yes	Yes	Yes	Yes		
Rockingham Nutrition Meals on Wheels	Yes		Yes				
Rockingham RSVP	Yes				Yes	Yes	
Salem Senior Center	Yes	Yes		Yes	Yes		
Silverthorne	Maybe						
Special Transit Service (STS)	Yes	Yes			Yes	Yes	
Town of Windham	No						
Windham Terrace	Yes			Yes	Yes		

Table 3.6. Study Area Towns Served by Transportation Providers

Provider	Atkinson	Chester	Danville	Derry	Hampstead	Londonderry	Pelham	Plaistow	Salem	Sandown	Windham
American Cancer Society	*	*	*	*	*	*	*	*	*	*	*
Atkinson Senior Van	*										
Caregivers - Derry		*		*	*	*				*	*
Caregivers - Salem	*						*		*	*	
Granite State Independent Living	*	*	*	*	*	*	*	*	*	*	*
Greystone Farm											
Kimi Nichols Center	*	*	*	*	*	*			*	*	*
Lamprey Health Care Senior Transportation	*	*	*	*	*	*		*	*	*	*
Pelham Senior Van							*				
Rockingham Adult Medical Daycare	*	*	*	*	*	*		*	*	*	*
Rockingham Nutrition Meals on Wheels		*		*		*		*	*		*
Rockingham RSVP	*	*	*	*	*	*		*	*	*	*
Salem Senior Center									*		
Silverthorne	*	*	*	*	*	*	*	*	*	*	*
Special Transit Service (STS)	*	*	*	*	*	*	*	*	*	*	*
Town of Windham				*					*		*
Windham Terrace				*		*	*		*		*
Total agencies	10	8	7	12	9	9	7	9	13	8	12

Table 3.7 - Underutilized Van Time in Combined Fleet

Provider	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30
American Cancer Society																		
Atkinson Senior Van																		
Caregivers - Derry																		
Caregivers - Salem																		
CLM Behavioral Health										11:30-1:30, 5 days, 1 van					2:30-5:00, 5 days, 2 vans (35 hours)			
Granite State Independent Living																		
Greystone Farm																		
Kimi Nichols Center																		
Lamprey Health Care Senior Transportation																		
Pelham Senior Van															1:30-5:00, Tues-Friday, 1 van (14 hours)			
Rockingham Adult Medical Daycare																		
Rockingham Nutrition Meals on Wheels																		
Rockingham RSVP																		
Salem Senior Center																		
Silverthorne																		
Special Transit Services (STS)																		
Town of Windham																		
The Upper Room																		
Windham Terrace																		

Seven vans operated by provider agencies show a combined total of approximately 120 hours per week of predictable blocks of idle van time that can be fully utilized if resources for additional driver time can be secured.

Table 3.8 - Vehicles Operated by Provider Agencies

Vehicles operated by provider agencies that remain at the table as potential participants in a coordinated regional system as of December 2002.

Provider Agency	Vehicle Make & Model	Capacity	Mileage
Salem Senior Center	1997 Ford Aero bus	16 + 2WC	71,000
	1990 Ford E-350 bus (backup)	16 pass	24,000
Kimi Nichols Center	2000 Grand Caravan minivan	7 pass	67,000
	97 Dodge Ram van	2 + 3 WC	84,000
	97 Small BoC bus	10 + 4 WC	96,000
	99 Dodge Maxi van	4 + 3WC	55,000
	2001 Small BoC van	4 + 4WC	20,000
	1995 Dodge Maxi (backup)	5 + 4WC	128,000
	2001 Dodge Caravan (backup)	7 pass	21,000
	1990 Dodge pickup (backup)	3 pass	99,000
Lamprey Health Care Senior Transportation Program	International BoC	20 + 2 WC	65,000
	BoC minibus	16 + 2 WC	114,000
	BoC minibus	16 + 2 WC	31,000
Special Transit Service, Inc.	1999 Dodge Braun conversion van	8 + 2 WC	160,000
	2001 Dodge Braun conversion van	8 + 2 WC	39,000
Rockingham Nutrition Meals on Wheels Program	1995 Ford van (Derry)	11 pass	60,000
	2001 Dodge Caravan (Plaistow)	7 pass	NA
Pelham Senior Center	1994 Ford Econoline BonC bus	21 + 1WC	67,000
CLM Behavioral Health	2000 Dodge Ram van	15 pass	63,000
	1993 Ford F-350 BoC bus	15 pass	150,000
The Upper Room	1998 Dodge Ram van	15 pass	70,000

Chapter 4. Options for Service Coordination

INTRODUCTION

There are currently more than seventeen agencies offering transportation services in the Greater Derry-Salem area. Each has its own mission, equipment, eligibility requirements, funding sources, and institutional objectives. All of the providers report that their transportation needs are being met somewhat well or very well. However, while providers only report turning away a limited number of clients in a week, estimates of the various transportation dependent populations in the region suggest a level of need much higher than the current level of service. The following pages outline costs and benefits of service coordination, coordination models that could be applied in the region, and criteria for selecting a coordinating host agency.

BENEFITS OF COORDINATION

Coordination can improve the performance of individual transportation providers as well as the overall mobility within the region. A regional coordinated service can achieve economies of scale in many areas by consolidating client intake, reservations, scheduling, and dispatching functions. Joint purchase of maintenance services, fuel, and items like scheduling software can also save money. Greater efficiency can stretch the limited funding and personnel resources available to the agencies in the region in a number of ways:

- Reducing duplication of effort in terms of staff time devoted to intake, scheduling, dispatching, and other administrative functions.
- Making more efficient use of vehicles by increasing the number of riders per trip.
- Streamlining the reimbursement billing process for Medicaid and other funding sources through the use of paratransit scheduling and tracking software, thus allowing providers to cost-effectively access critical funding.

Another benefit related to funding service is that centralized tracking of trip information allows providers to more easily demonstrate their impact and effectiveness when they pursue funding. An innovative coordinated system will help providers access funding that may not be available to them for general operation of individual vans.

COSTS OF COORDINATION

In terms of overall dollars going to transportation services, a coordinated system will initially be more expensive than the status quo, as funding will need to be secured to establish and staff the call center. It is unlikely to free up funding to be shifted to other services beside transportation. In the long run, though, it will reduce unit cost per ride and overall cost effectiveness. It will also expand the region's ability to secure funding for transportation, thus expanding the ability to provide service.

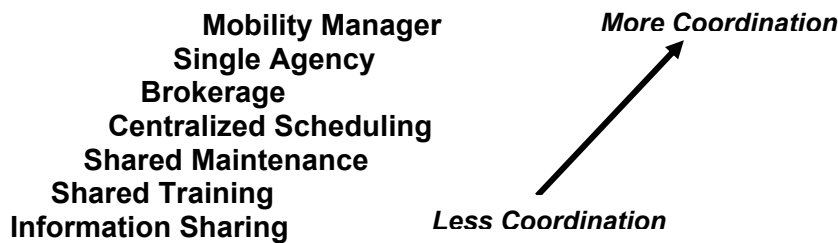
Securing this start-up funding will not be easy to achieve, even with a strong model and committed partners. Concord Area Transit and the Community Providers Network are finding this out as they try to implement their coordination plan for Merrimack County. Funds through

NHDOT and NHDHHS may be more readily available in the coming years, as these agencies are now working to coordinate their programs and funding streams. In the meantime, the most likely source of funding for establishing a call center or brokerage will likely be private foundation funding.

ALTERNATIVE MODELS FOR COORDINATION

The Community Transportation Association of America describes what it calls the "Coordination Continuum" pictured in Figure 4.1. Coordination can range from simple cooperation, in terms of sharing information, up to full centralization of all transportation services with a single agency.

Figure 4.1 - The Coordination Continuum



While there is a benefit to any level of coordination, the real benefits in terms of eliminating duplication of effort and reducing unit costs per ride are realized once major functions such as eligibility processing, scheduling, dispatching, billing, and funding administration are centralized. Most coordinated systems use one of the three models at the top of the list - brokerage, single agency, or mobility manager. These three models, and a fourth that centralizes scheduling and dispatching, are described in the following pages.

The two models at the top of the list in **Figure 4.1**, single agency control and mobility management, involve consolidation of transportation services. In these approaches, all human service transportation in the region would be managed by a single agency. Vehicles previously operated by other providers in the region would be shifted to the central agency to operate and maintain. This sort of centralization provides perhaps the greatest opportunities for improving service consistency, quality, and cost effectiveness, as duplication of effort among agencies is eliminated. However, depending on the existing mix of transportation provider agencies in a region, this sort of centralization is not always the most effective or feasible approach. The potential drawbacks of these models are also discussed below.

Single Agency Control

Under the single agency control model one agency provides all transportation services for individuals in the region. Other agencies participating in the coordinated system contract with this lead agency to meet their transportation needs. This approach is very efficient in terms of centralized management and operations. However, it is usually used only where there is a strong existing regional transit agency that already provides much of the transit service in a region. While several providers have expressed an interest in contracting out their transportation services, consolidation to a single provider is not feasible in the region.

Mobility Manager

The mobility manager model takes the single agency model one step further by centralizing provision of all modes of transit in the region. The mobility manager not only provides all demand response service in the region, but also provides fixed route transit service, and serves as the clearinghouse for information on vanpool and carpool ridematching.

Given the large number of demand-response providers in the region, the important role played by existing volunteer networks in the region, and the lack of a single dominant transit agency, we believe that the single agency and mobility manager models are not appropriate models for the Derry Salem area at this point. The following pages describe in detail two models which may be appropriate for the region: the brokerage model, and a somewhat less sophisticated call center model that would coordinate scheduling and dispatching but would not centralize billing.

Brokerage Model

Under a brokerage the overall management of the transit system is consolidated, but the vehicle fleets are not consolidated as with a single agency model. Brokerage systems have the following characteristics:

- The broker serves as central point for client contact, intake/eligibility determination, scheduling, dispatching, and reporting/invoicing.
- The broker assigns rides to any of the participating provider agencies, typically on a least-cost basis.
- The broker may or may not provide service directly
- The broker usually manages maintenance for all vehicles in the combined fleet, insurance, and staff training

The brokerage concept is probably the most widely used coordination model nationally. It makes efficient use of staff time by centralizing intake, scheduling, dispatching; while maintaining existence of multiple providers.

Funding and billing are typically run through the broker in a brokered system. Providers bill the broker for each ride they provide, while the broker bills funding agencies for reimbursement. The broker charges an administrative fee for each ride it schedules to cover the costs of running the call center and other services.

This process is simplified through the use of paratransit scheduling and tracking software. Once a client has been entered into the computer system and his/her eligibility for Medicaid or other funding programs determined, the broker can readily print out reports and invoices for billing and reimbursement. Most scheduling software is based on a Geographic Information System (GIS), such that the program can locate a client's home, identify the most appropriate vehicle in the area to make the pick-up, and identify the most efficient route to mesh that client's trip with other trip requests. Some software packages also allow multiple providers as well as funders to access scheduling, billing, and reporting information on-line.

A brokerage could be most easily established through an agency that already has staff capacity in place to handle intake, scheduling, billing, training, and maintenance. A brokerage could also be housed with an agency that does not already provide transportation services, but all of these positions would need to be hired and an entirely new structure created. For the Merrimack County brokerage study, ATC Paratransit estimated that a staff of five would be needed to establish a brokerage as a new independent agency: 1) a Manager; 2) a Reservations Agent, 3) a Scheduler; 4) a Dispatcher; and 5) an Administrative Assistant. This level of staffing was based on an estimated number of rides of 400 per day. Based on the incomplete information on ridership gathered through the first round of surveys, participation of all providers would yield a combined ridership of approximately 160-200 per day, so lower staffing is likely possible. Also, to the extent that one or more of these roles could be provided in kind by the agency taking on the Brokerage office functions, this number of new staff, and the consequent cost, could be reduced.

Summary of Broker Responsibilities

The following list outlines the typical responsibilities of a brokerage, as proposed for Merrimack County and implemented elsewhere in the country:

Client Intake

- Conduct client certification or eligibility determination depending upon various participating agencies' policy and procedures.
- Develop computerized client information database including address information, special needs, funding eligibility, etc.

Reservations & Scheduling

- Provide call center services including computerized trip reservations, trip distribution, trip assignment, vehicle routing and scheduling, and manifest production/distribution.

Reporting & Billing

- Establish provider reimbursement methodology, fare structure and agency invoicing procedures.
- Select and develop contracts with service providers through competitive procurement or a negotiated process.
- Negotiate reimbursement agreements with agencies whose clients use the system.
- Accept completed manifests from service providers and update/reconcile trip database accordingly by recording no-shows, cancels, add-ons, etc.
- Generate all required reports, payable summaries and invoices from the database.
- Establish a record keeping system that ensures accountability and data integrity and allows for a well-defined audit trail for all transactions.
- Monitor service provider compliance with contract requirements, federal and local regulations.

Training & Operations Standards

- Provide all training of broker staff including program information, operation of office equipment and software, sensitivity and telephone courtesy.
- Coordinate training for drivers from all providers in safety and client assistance practices.
- Establish service standards, policy and procedures; program parameters; and training and monitoring programs in conjunction with an oversight committee and funding agencies.
- Monitor service performance including on-time performance, missed trips, no shows, driver courtesy, safety, passenger ride time, vehicle standards and wheelchair loading and tie down procedures.
- Accept and respond to all complaints and commendations in a timely manner and develop complaint reports and monitor for trends.

Promotion & System Development

- Develop and distribute program information; promote and market the service.
- Recruit new providers and agencies into the coordinated system.
- Pursue additional funding from public and private sources to expand the system.

General Oversight

- Assist in establishing an advisory/oversight committee that includes representation from participating agencies, riders, funding sources and service providers.

Vehicle Maintenance

- Establish maintenance standards and schedules for all vehicles used in the coordinated system, and monitor compliance with the standards. In some cases the broker may directly provide vehicle maintenance if it has the necessary facilities and staff; or it may contract for maintenance with a third party.

Centralized Scheduling - Simplified Call Center Model

This model would centralize the intake, reservations, scheduling, and dispatching functions of the coordinated system without centralizing the funding and billing processes. As with the brokerage model, housing the call center with an agency that already has a structure in place for scheduling and dispatching rides will be more cost effective than creating the call center from scratch. Based on an estimated demand of 150-200 rides per day to be provided by the coordinated system, a Simplified Call Center could likely be run effectively by a staff of two to three, including a Manager, a Reservations Agent/Scheduler, and a Dispatcher. The Manager would serve multiple roles, overseeing the other staff and the program as a whole, while also working to promote and expand the system, and implement coordinated training and service standards. While this approach does not capture major efficiency gains through centralized funding and billing, it could potentially be implemented without a restructuring of Medicaid and other funding processes at the state level.

Summary of Simplified Call Center Responsibilities

The following list outlines proposed responsibilities of a simplified call center. The major departures from the brokerage model are the removal of billing and maintenance functions.

Client Intake

- Conduct client certification or eligibility determination depending upon various participating agencies' policy and procedures.
- Develop computerized client information database including address information, special needs, funding eligibility, etc.

Reservations & Scheduling

- Provide call center services including computerized trip reservations, trip distribution, trip assignment, vehicle routing and scheduling, and manifest production/distribution.

Data Gathering & Reporting

- Accept completed manifests from service providers and update/reconcile trip database accordingly by recording no-shows, cancels, add-ons, etc.
- Generate reports tracking usage, as well as payable summaries to allow individual providers to bill Medicaid, TANF, and other funding agencies for services provided to eligible clients.

Training & Operations Standards

- Provide all training of broker staff including program information, operation of office equipment and software, sensitivity and telephone courtesy.
- Coordinate training for drivers from all providers in safety and client assistance practices. (optional)
- Establish service standards, policy and procedures; program parameters; and, training and monitoring programs in conjunction with an oversight committee and funding agencies.
- Monitor service performance including on-time performance, missed trips, no shows, driver courtesy, safety, passenger ride time, vehicle standards and wheelchair loading and tie down procedures.
- Accept and respond to all complaints and commendations in a timely manner and develop complaint reports and monitor for trends.

Promotion & System Development

- Develop and distribute program information; promote and market the service.
- Recruit new providers and agencies into the coordinated system.
- Pursue additional funding from public and private sources to expand the system.

General Oversight

- Assist in establishing an advisory/oversight committee that includes representation from participating agencies, riders, funding sources and service providers.

Figure 4.2 - Summary of Functions Centralized Under Each Service Model

Function	Brokerage	Simplified Call Center
Client intake/eligibility determination	Yes	Yes
Scheduling & Dispatching	Yes	Yes
Providing rides	Possible	Possible
Data gathering & reporting	Yes	Yes
Billing & funding	Yes	No
Training & operations standards	Yes	Yes
Promotion & system development	Yes	Yes
General oversight	Yes	Yes
Maintenance	Possible	Possible

The three coordination measures at the bottom of **Figure 4.1** - shared information, shared training, and shared maintenance - are all considered as elements of the two service models. Shared information and training will be essential for either model to ensure consistent service. Sharing maintenance is not essential, but provides potential for cost savings and increased safety through consistent maintenance schedules and tracking.

CRITERIA FOR SELECTING HOST AGENCY

As noted above, a brokerage or a call center could be housed with an existing agency that provides transportation services, or with another agency that does not provide transportation, but recognizes transportation as a key need in accessing health care, work, or support services. In theory any of the existing providers participating in the study could take on the coordination role, though the role could most efficiently be filled by an agency that already has staff and infrastructure in place to schedule and dispatch rides. STS and to some extent Lamprey Health Care are the two providers who currently have this infrastructure.

Agencies that are not transportation providers also frequently serve as brokers. The project team discussed the prospect of taking on a coordinating role with both Southwest Service Link and Community Health Services of Derry. This approach would have the advantage of eliminating concerns that a broker/provider will assign preferred trips to itself. At the same time, brokers that are not providers may be less financially in situations where trip demand is relatively low.

In general, criteria for selecting a host agency include the following:

- Willingness and capacity of host agency to take a proactive role in developing the coordinated system by adding new providers and client agencies as time goes on.
- Ability to secure funding from a range of sources (A private not for profit or public agency is key to securing foundation funding).
- Ability of agency, under its mission statement, to serve all parts of the transit dependent population in the region, including not just the elderly and disabled, but also low-income clients, youth, and others needing transportation options.
- Political acceptability of the host agency to other providers and client agencies taking part in the coordinated system.
- Willingness to consider eventual operation of fixed bus routes under contract with a regional transit system. The feasibility of fixed route service in the region, including potential routes, cost and ridership estimates, funding sources, and potential management structures, is discussed in Chapters 5 and 6.

Chapter 7 summarizes input received from provider agencies and other members of the Project Advisory Committee regarding preferences for both a service coordination model and an agency to take on the coordination role.

Chapter 5. Fixed Route Service Options

INTRODUCTION

While the emphasis of this study has been largely on development of a coordinated demand response transportation system, its purpose is also to examine the potential need and demand for fixed route service in the region. Extensive fixed route service is usually not practical in an area with population densities as low, and development as dispersed, as much of the Greater Derry-Salem region. However, this sort of service may well be effective in the population centers of Derry and Salem, and to provide connections to employment, retail, and service centers outside of the study area such as Manchester and Methuen.

In areas with adequate demand, fixed route transit service is a much more cost effective means of transporting people than the standard demand response service currently available in the region. Average cost per trip for rural fixed route transit service in New Hampshire is approximately \$2.58/trip, while average cost of a demand response trip is approximately \$16.00. This can make demand response service cost prohibitive for individuals who are not eligible for reimbursement of transportation costs under programs like Medicaid. Expanding transit access in the region to the general low income and youth populations will require some sort of fixed routes. The following pages look at a range of different options for this service.

REGIONAL COMMUTE PATTERNS

One key role of transit is to provide access to employment. At a minimum, transit is necessary to provide access to jobs for individuals without automobiles. Given the region's problems with road congestion and air pollution, a longer term goal for the region and for the state as a whole should be providing local and regional transit service that is convenient enough to attract commuters that have the option to drive. While a range of factors make this broader goal difficult to achieve in the short term, providing a basic level of employment transportation in the region is achievable in the next 2-3 years.

Table 5.1 on the following page shows commute data from the 1990 Census. While these data are twelve years old, corresponding data from Census 2000 will not be available until April 2003 with the release of the 2000 Census Transportation Planning Package. Major growth in southern NH during the past decade will make the overall number of commuters larger in the 2000 Census. It will likely show large increases in the number of individuals commuting to Massachusetts, though a probable decrease in the percentage of residents commuting to Massachusetts as there has been substantial job creation in southern NH in the past decade. These data are also likely to show growth in commuters from Massachusetts to Salem's large base of retail employment.

These figures highlight the large number of residents in the region who commute to jobs in Massachusetts. Taken together, Massachusetts workers account for the largest single commuter block for any of the eleven towns in the study area, accounting for over 50% of commuters in border towns of Plaistow, Salem, Atkinson, and Pelham. As far north as Chester, 26% of workers in the town commute to jobs in Massachusetts.

Figure 5.1 – Regional Commute Patterns

Place of Work	TOWN OF RESIDENCE (In Study Area)										
	Atkinson	Chester	Danville	Derry	Hampstead	Londonderry	Pelham	Plaistow	Salem	Sandown	Windham
Atkinson	252	-	-	-	69	-	-	-	-	-	0
Chester	-	286	-	-	-	-	-	-	-	-	0
Danville	-	-	106	-	48	-	-	-	-	-	0
Derry	22	180	-	3,320	91	737	21	-	87	148	160
Hampstead	91	-	69	-	592	-	-	31	77	85	0
Londonderry	-	26	-	888	-	2,124	32	-	215	-	165
Pelham	-	-	-	-	-	-	1,015	22	-	28	0
Plaistow	404	-	102	-	195	-	-	978	84	237	92
Salem	256	65	97	1,357	285	537	303	194	4,491	148	486
Sandown	-	-	-	-	-	-	-	-	-	247	0
Windham	21	-	-	175	-	95	56	-	160	-	804
Manchester	54	156	24	1,263	110	1,299	75	53	148	60	162
Nashua	48	60	-	629	52	797	321	-	225	27	199
Concord	-	-	-	-	-	-	-	-	-	-	0
Elsewhere in NH	30	86	101	717	46	766	159	187	55	29	156
Vermont	8	-	2	16	-	-	-	-	-	-	0
Maine	-	8	9	55	-	22	8	-	-	-	0
Massachusetts	1,566	375	636	6,584	1,770	3,340	2,773	2,312	8,019	977	2149
Andover	163	-	66	889	169	314	266	245	1,174	144	226
Haverhill	297	49	97	-	372	-	-	506	-	85	0
Lawrence	157	36	70	585	146	219	-	216	1,170	69	0
Methuen	-	38	-	-	-	-	-	-	885	-	171
N. Andover	216	-	79	447	228	-	-	361	588	145	0
Boston	-	52	-	758	-	348	148	-	-	-	315
TOTAL	2,890	1,455	1,351	16,409	3,554	10,660	4,853	4,004	14,095	2,207	4,726

Source: 1990 U.S. Census

Intra-town commutes make up the next largest block. In Salem, the largest employment center in the study area, 32% of workers commute to jobs in town. This drops to the neighborhood of 20% for the towns of Londonderry, Derry, and Plaistow, with smaller but still significant employment bases. Outlying bedroom communities such as Atkinson, Sandown, and Danville show in-town commute rates of 8%-11%.

These data point to Salem as the major employment center within the study area. Close to 4500 Salem residents work in town, while over 1350 Derry residents commute to Salem. Salem commuter numbers from other towns in the region range from 65 to 537. NH Employment Security data show that total employment in Salem grew from 14,349 in 1990 to 21,684 in 1999.

Manchester was the second largest NH commute destination for Derry residents (1,263), and the largest for Londonderry (1,299). Nashua represents a smaller, but still significant destination for residents of Derry (629), and Londonderry (797) residents, but numbers of Nashua commuters drop off sharply in other communities.

Figure 5.2 - Major Origin Points for Commuters to Derry, Salem, and Londonderry

Place Of Work	Town of Residence					
	Salem	Derry	Londonderry	Manchester	Nashua	Massachusetts
Salem	4,419	1,357	537	476	437	2,930
Derry	87	3,320	737	593	<90	217
Londonderry	215	888	2,124	1,098	151	278

Source: 1990 Census

ROUTE OPTIONS

The following pages outline a range of possible fixed routes connecting key destinations within and outside of the study area. These route options fall under several groupings as follows:

- A. In-Town Circulator Service in Derry & Salem
 - A1. *Derry Circulator Loop*
 - A2. *Salem Circulator Loop*
- B. Regional Connections
 - B1. *Derry-Salem with Town Loops*
 - B2. *Salem-Methuen with Salem Loop*
 - B3. *Derry-Manchester with Derry Loop*
 - B4. *Derry-Londonderry Connector*
- C. Feeder Routes from Outlying Towns

Factors considered in developing and analyzing potential transit routes include:

- Providing connections among major trip generators in the region including:
 - Publicly assisted housing and other dense residential areas
 - Major employment sites
 - Shopping locations
 - Community services such as libraries, senior centers, childcare, and town offices.
 - Health care facilities
- Commuter flows between towns
- Local priorities likelihood of local funding support
- Estimated cost of service
- Estimated ridership and route productivity

Cost estimates are based on unit operating costs used by COAST, the regional transit agency in the Seacoast region. Operating cost is the sum of an hourly cost of \$22.00/hour and a per mile rate of \$0.71/mile. These costs cover driver time, fuel, maintenance, vehicle depreciation, and administrative overhead. Costs are shown for the number of buses in regular service on a given route. One or more additional vehicles will need to be purchased for backup.

Ridership estimates are generated using a model for rural and suburban transit demand developed by the Transit Cooperative Research Program, and used extensively by the Community Transportation Association of America (CTAA). The model accounts for factors including elderly, mobility limited, and low-income populations; as well as square mileage of the area served by a route, and vehicle miles of service provided on a given route.

Productivity indicators include riders per service hour, and riders per vehicle mile. These are compared against statewide averages for rural fixed route service during the last full fiscal year. The state average number of riders/vehicle mile during this period was 0.47, with a range from 0.41-0.56. The average number of riders/service hour was 9.19, with a low of 8.09 and a high of 10.86. Estimated productivity for each route is compared against these standards.

A. In Town Circulator Service in Derry & Salem

In-town loops in both Derry and Salem are key building blocks of a regional transit network, as these are the population centers of the region, and the only towns in the region with well-defined downtowns and a population density sufficient to support local service. These loops might one day exist on their own to provide in-town connections with relatively high frequency service, but in the short term are probably more appropriate as part of a larger route collecting passengers for longer distance regional connections.

A1. Derry Circulator Loop

Map 5.1 shows a proposed circulator loop in Derry, connecting major high-density residential areas, retail, employment centers, and community services. Residential areas potentially served by the route include Franklin Village, Nutfield Heights, the Fairways, Seaview Condominiums, Derry Country Club Estates, and Abbott House. Retail and

employment centers include WalMart, Hood Plaza, Shaw's, and Victory Market. Community services include the Gerrish Center, Town Hall, the senior meals site, St. Thomas Catholic Church, Parkland Medical Center, and various childcare centers. WalMart is a likely transfer point to other routes.

The Town of Derry has expressed an interest in service as frequent as every hour. The table below looks at estimated cost and ridership for six day/week service with options of 4, 6, and 8 trips per day. Operating costs reflect these limited service hours. Productivity estimates compare well against the state averages in terms of riders/mile, though less so in terms of riders/service hour.

Option A1 - Derry Circulator Loop

Operating Assumptions: Service 6 days/week	Annual Operating Cost	Capital Costs	Total Cost (Year 1 of Service)	Estimated Daily Ridership	Riders per service hour	Riders per service mile
4 round trips/day:	\$34,421	\$100,000	\$ 134,421	29	7.1	0.79
6 round trips/day	\$51,631	\$100,000	\$ 151,631	36	6.0	0.67
8 round trips/day	\$68,842	\$100,000	\$168,842	44	5.5	0.61

A2. Salem Circulator Loop

The town of Salem contains the second largest resident population, and the largest employment base in the study area. 1990 Census commute data indicate 4,400 Salem residents work in-town – a sizeable commute market. During the work day, the combination of out of town commuters and shoppers expands Salem's population from 28,000 to 81,000, creating significant traffic on NH 28 where it passes through the center of town.

Map 5.2 shows a proposed circulator loop in Salem. Housing sites served by the loop include the Millville Arms, Telfer Circle, Cluff Crossing, Lancelot Court, and Kings Court. Retail connections are extensive, including the Mall at Rockingham Park, WalMart, several supermarkets and a pharmacy. Other major employment sites include industrial parks at Industrial Way, Stiles Road, and Pelham Road, all clustered near Exit 2 off of I-93. Community services include the new Salem Senior Center, Town Hall, the high school, and Kelley Library. The Mall at Rockingham Park is a potential transfer point to other routes. As a stand-alone loop, the route is 10 miles long and can conservatively be covered in under an hour with stops.

Productivity estimates are higher for the Salem loop than for the Derry loop, due in large part to the higher elderly population in Salem, which is weighted in the model. While not reflected in the model, the high concentration of retail and services will also add to the productivity of this route.

Option A2. Salem Circulator Loop

Operating Assumptions: Service 6 days/week	Annual Operating Cost	Capital Costs	Total Cost (Year 1 of Service)	Estimated Daily Ridership	Riders per service hour	Riders per service mile
4 round trips/day:	\$35,281	\$100,000	\$ 135,281	43	10.8	1.08
6 round trips/day	\$52,922	\$100,000	\$ 152,922	58	9.6	0.96
8 round trips/day	\$70,563	\$100,000	\$170,563	72	9.0	0.9

B. Regional Connections

Within the project study area, a natural connection appears to exist between the towns of Derry and Salem. Salem is the largest employment and retail center in the region, while Derry has the largest overall population as well as the most TANF clients, who are candidates for employment transportation. Each town also has strong connections with towns outside the region. Salem is tightly connected to Methuen and Lawrence, and other Middlesex County communities, with larger numbers of workers commuting to Massachusetts than north to Derry, and many residents receiving their health care at Holy Family Hospital in Methuen or at Lawrence General hospital. In addition, a large number of employees working in Salem, especially in the retail sector, commute in from northern Massachusetts. In Derry's case the connection is with Manchester. Derry is part of the Metropolitan Planning Organization for the Manchester urban area. As noted earlier, almost as many Derry workers commuted to Manchester as worked within Derry, and many Derry residents are linked to health care at Catholic Medical Center, Elliot Hospital, and the VA hospital. Options for providing these regional connections are analyzed below. In each case, inter-town connections are combined with in-town circulator loops to allow ease of access for residents, and to minimize the number of buses needed to provide these basic connections.

B1. Derry-Salem Connector with in-town Loops

The large number of commuter trips from Derry to Salem points to potential for a fixed route connection between the two communities. This is particularly the case if Job Access Reverse Commute funding can be secured to connect the large number of TANF clients in Derry to job opportunities in Salem, thus supplementing FTA urban formula funds available to a regional system. The route would combine the in-town loops described in Options A1 and A2 with a connection between the two communities via Route 28. This option is viewed as a potential stand-alone route onto which other regional connections can be added. It exceeds state averages for riders per service hour and per service mile.

Option B1. Derry-Salem Connector with Loops

Operating Assumptions: Service 6 day/week	Annual Operating Cost	Capital Costs	Total Cost (Year 1 of Service)	Estimated Daily Ridership	Riders per service hour	Riders per service mile
4 round trips/day:	\$83,470	\$100,000	\$183,470	105	13	0.75
5 round trips/day	\$104,338	\$100,000	\$204,338	124	12	0.71
6 round trips/day	\$125,206	\$100,000	\$225,206	143	12	0.68

B2. Salem-Methuen with Salem Loop

A connection between Salem and Methuen can best be provided by a route combining the Salem in-town loop described above with a leg down NH 28 to Methuen Square. At Methuen Square passengers can transfer to Merrimack Valley Regional Transit Authority bus routes that connect to Holy Family Hospital and other destinations in Methuen and Lawrence. Given the concentration of employment and retail development in Salem, this route is likely to generate substantial ridership from Massachusetts riders north to shopping and/or jobs in Salem. This is reflected in the very high productivity numbers, with riders/service hour between two and three times the state average. Riders per service mile are similarly high. The high productivity of this route relative to the Derry-Manchester route is discussed below.

Option B2. Salem Methuen with Salem Loop

Operating Assumptions: Service 6 days/week	Annual Operating Cost	Capital Costs	Total Cost (Year 1 of Service)	Estimated Daily Ridership	Riders per service hour	Riders per service mile
4 round trips/day:	\$41,735	\$100,000	\$ 141,735	124	30.9	1.77
6 round trips/day	\$62,603	\$100,000	\$ 162,603	164	27.3	1.56
8 round trips/day	\$83,470	\$100,000	\$ 183,470	204	25.5	1.46

B3. Derry-Manchester with Derry Loop

As with the Salem-Methuen connection described above, a Manchester-Derry connection can likely best be provided by combining an in-town loop with a leg up I-93 and I-293 to the Manchester Transit Authority's downtown hub adjacent to the Center of New Hampshire and Veterans' Park. From this hub hourly service is available from the MTA to Veterans Hospital, Catholic Medical Center, and the Mall of New Hampshire. Less frequent service is available to Manchester airport.

Option B3. Derry-Manchester with Derry Loop

Operating Assumptions: Service 6 days/week	Annual Operating Cost	Capital Costs	Total Cost (Year 1 of Service)	Estimated Daily Ridership	Riders per service hour	Riders per service mile
4 round trips/day	\$90,355	\$100,000	\$190,355	87	10.8	0.50
5 round trips/day	\$112,943	\$100,000	\$ 212,943	105	10.5	0.49
6 round trips/day	\$135,532	\$100,000	\$ 235,532	124	10.3	0.48

A note is necessary to explain the low estimated ridership for the Manchester-Derry route relative to the Salem-Methuen route. The longer route makes the round trip travel time on the route twice as long (2 hours vs. 1 hour), enabling fewer trips/day if a single bus is used on both routes. In addition the numbers above are based on an assumption that the

Derry- Manchester route will primarily serve Derry residents, given the lack of services in Derry that are not also available in Manchester. Because of this, Manchester population figures have been left out of the equation. In the case of Salem-Methuen, the combination of retail jobs and tax free shopping in NH is anticipated to generate significant ridership among Methuen residents, thus boosting projected use significantly.

B4. Derry-Londonderry Connector

As the third largest population center in the region, Londonderry should be considered for a transit connection to Derry. The route for which estimates are calculated below includes the Derry in-town loop, with a leg extending south down Route 102 as far as the Crossroads Mall at the intersection of Route 128. This route would provide connections to a number of retail outlets, as well as Londonderry Town Hall and a multi-screen cinema. One drawback to this route is the low residential density in Londonderry, which will limit the number of riders boarding in Londonderry. This proximity of residential development to the bus route is not accounted for in the TCRP model. Given the low residential density in the town, planning staff from the Town of Londonderry have indicated a lack of interest in fixed route service at this point.

Option B4. Derry-Londonderry Connector

Operating Assumptions: Service 6 days/week	Annual Operating Cost	Capital Costs	Total Cost (Year 1 of Service)	Estimated Daily Ridership	Riders per service hour	Riders per service mile
4 round trips/day:	\$39,584	\$100,000	\$ 139,584	37	9.4	0.62
6 round trips/day	\$59,376	\$100,000	\$ 159,376	46	7.7	0.51
8 round trips/day	\$79,168	\$100,000	\$179,168	55	6.8	0.45

C. Feeder Routes from Outlying Towns

Extending regular, multiple trip/day fixed route service beyond the spine connecting Manchester, Derry, Salem, and Methuen is not likely to be cost effective. Outlying towns can be most effectively served with demand response or deviated fixed route feeder services that connect in with the main trunk line in Derry or Salem. Service of this sort already exists in the region in the form of Lamprey Health Care's weekly shopping routes serving Danville and Sandown; Hampstead, Atkinson, and Plaistow; and Derry, Londonderry, and Windham.

Based on model calculations, running services of this sort on a one or two day/week basis would attract 5-10 riders per trip. Annual cost to run a service of this sort one day/week, assuming a round trip mileage of 30-50 miles, is between \$9,000 and \$10,000.

ADA COMPLEMENTARY PARATRANSIT REQUIREMENTS

The Americans with Disabilities Act requires operators of FTA funded fixed bus routes to provide complementary demand-response paratransit service for individuals who are unable to use the fixed route service due to a disability. This service must be provided within a radius of

0.75 miles of any fixed transit route, or a corridor of 1.5 miles. Clients must request a ride at least 24 hours in advance, and service must be available within the same hours that fixed route service is provided.

In the Seacoast Region, COAST currently averages 90-100 ADA trips per month, or approximately 4 per day, for a transit system with more route miles than are anticipated in the study area. However, the demand for rides has increased several-fold since 2001. To date, rides have been provided by various staff on a part time basis using two vehicles, but increasing demand will require a change to this ad hoc approach.

Providing ADA rides will be a key area where coordination can improve efficiency. Reliably providing rides with 24 hour advance reservation is beyond the current resources of the demand response providers in the region, so at least one dedicated driver and vehicle will need to be available for ADA service. However, once a day's schedule has been set 24 hours in advance, available time on the ADA van can be used to provide additional short notice trips. As the resources of the coordinated system grow, and as demand for ADA rides reaches the point of outstripping the capability of one van, additional ADA rides may also be provided by other vans in the system.

EQUIPMENT AND OPPORTUNITIES FOR INNOVATION

Buses used for small scale community transit of the sort proposed here are typically smaller than a standard heavy-duty urban transit bus. These measure 20-30 feet in length rather than 35-40 for a heavy duty urban bus, and hold 15-25 passengers rather than 30-35 passengers. These vehicles are more efficient for carrying smaller numbers of riders, as well as navigating neighborhood streets. They range in price from \$80,000 for smaller body-on chassis vehicles, with bus bodies built onto truck chasses, to \$100,000 and up for a purpose-built, medium duty transit bus. Heavy duty transit buses range from \$250,000 upward. A purpose-built bus is preferable both from the standpoint of durability, and from the standpoint of image. To the extent the transit system aims to attract riders who are not social service program clients, buses that look like regular transit vehicles are preferable.

Used buses are often purchased by small transit systems to meet broad needs on a small budget. While this option shouldn't be dismissed altogether, the reliability of used buses tends to be low. The unpredictability of maintenance costs and available buses that this creates can be a major problem for a small transit system with limited resources for back-up buses.

Perhaps more importantly, purchasing new buses will allow the system take advantage of new technologies that may open the door to certain sources of funding. One aspect of this is technologies to reduce air pollution emissions, such as ultra low sulfur diesel or biodiesel. To the extent that transit in the region provides significant air quality benefits, the system can apply for federal Congestion Mitigation/Air Quality funding to cover both operations and capital costs. Other innovations can improve scheduling efficiency, such as Automatic Vehicle Locators and Mobile Data Terminals, which allow a dispatcher to locate all vehicles on the road at once using global positioning system (GPS) technology. Knowing this, a dispatcher can readily add trips on short notice, knowing which vehicles are near a pick-up location.

Use of new technologies such as these will also better position the system to pursue private foundation support for innovative transit projects. Given the limited amount of FTA funding available to the region, and the difficulty of raising local match to secure FTA funding, foundation moneys will likely be a key funding source for the new regional transit system. While most foundations are unwilling to fund standard transit system operations, an innovative project using new technologies to improve transit service in a region is likely to be an attractive demonstration project.

RECOMMENDATIONS

Fixed route service is most cost effective in providing connections between and within the larger population, employment, and service centers that have relatively high population density. Key connections in the region include the following:

- In-town circulator routes in Derry and Salem connecting residential areas to shopping and employment centers and community services.
- Regional connections between Manchester, Derry, Salem, and Methuen. While the four communities form a continuous spine down I-93 and NH 28, the connections can likely best be provided through a series of segments connecting Derry to Manchester, Derry to Salem, and Salem to Methuen.
- Deviated fixed route as well as expanded demand response feeder service from outlying towns into Salem.

The level of resources needed to provide these connections will vary widely depending on the frequency of service on each route. A route geared to employment transportation should have at least two runs during AM and PM commute times. One or more additional runs during the day allow flexibility for other riders to take a half-day trip for shopping, medical care, or other activities. Frequency on in-town loops is ideally higher given the shorter distances covered. The following proposed routes and frequencies seek to balance meeting the need for employment transportation with shopping, medical needs, and other trips against cost of service, which obviously rises significantly as trips are added. Each of these routes, and the number of trips prescribed, are designed to be run with one bus.

Two phases of implementation are envisioned for fixed route service in the region based on the availability of matching funding.

Phase I - Basic Regional Connector Service

1A. Derry-Salem Route with In-Town Loops

Establishing basic fixed route circulator service within the towns of Derry and Salem, and between the towns, is recommended as the first phase of building a fixed route transit system for the region. This route will provide access to local services for residents of each town, as well as access to employment and services in Salem for Derry residents. While this route shows lower productivity estimates than the Salem-Methuen connection, establishing a basic trunk service

within the region is considered an important first step in building a regional system. The priority also allows a blending of FTA funds designated for the Southern NH portion of the Boston urbanized area, which includes Salem, and new FTA funds allocated to NH based on urban growth in Derry and Londonderry between 1990 and 2000. These funding sources and their eligible uses are discussed further in Chapter 6.

Stops on the in-town loops are indicated on **Maps 5.1 and 5.2**. Round trip time for the route is approximately 120 minutes. A five trip per day schedule will allow morning and evening commute services, with one mid-day run, and a ridership estimated at 124. Estimated cost for six day/week service with five round trips per day is \$104,338. Estimated capital cost is \$100,000. Required non-federal match will be approximately \$52,000 for annual operating expenses, and \$20,000 for bus purchase.

B. ADA Complementary Paratransit & System Backup Bus

ADA requirements for complementary paratransit service should be achievable with one van, based on information from COAST, which currently averages 90-100 ADA trips per month, or approximately 4 per day. Given the 24 hour advance reservation requirement for ADA trips, the regional broker will likely be able to also schedule additional short notice trips on the ADA van. Assuming an hourly operating expense of \$25.80, operating a service 10 hours/day, six days/week to match the fixed route is estimated to cost approximately \$77,000/year. A backup bus will need to be available in case of a breakdown among the primary vehicles in the system.

Figure 5.4 - Estimated Cost for Phase I

Service	FTA Operating	Operating Match	Total Operating	FTA Capital	Capital Match	Total Capital
Derry-Salem with Loops	\$52,169	\$52,169	\$104,338	\$80,000	\$20,000	\$100,000
ADA Paratransit (1 van)	\$38,700	\$38,700	\$77,400	\$40,000	\$10,000	\$50,000
Backup bus	NA	NA	NA	\$80,000	\$20,000	\$100,000
Total	\$90,869	\$90,869	\$181,738	\$200,000	\$50,000	\$250,000

Year One Total Costs		Ongoing Costs	
Total Service Cost	\$431,738		
Total FTA Funding	\$290,869	Annual FTA Operating	\$90,869
Total Local Match	\$140,869	Annual Operating Match	\$90,869

Phase II - Enhanced Regional Service with Manchester and Methuen Connections

A. Salem-Methuen Route with Salem In-Town Loop

A Massachusetts connection is a priority for the Town of Salem, given links to medical care in Massachusetts, as well as the potential to bring in Massachusetts employees and shoppers to benefit local business. Round trip time on the route is approximately one hour. An 8 trip/day schedule will allow morning and evening commute service as well as mid-day connections for an estimated at 204 daily riders. Estimated cost for six day/week service with eight round trips/day

is \$83,500. Estimated capital cost is \$100,000. Required non-federal match will be approximately \$42,000 for annual operating expenses, and \$20,000 for purchase of a bus.

B. Derry-Manchester Route with Derry In-Town Loop

This connection is a priority for the Town of Derry, and together with a Salem-Methuen connection should be a priority for the region. Round trip time for the route is approximately 2 hours. A five trip/day schedule will allow an early morning connection for office or manufacturing jobs, a later morning connection for retail jobs, a mid-day run to support half-day shopping or medical appointment trips, and two afternoon return runs. Daily ridership is estimated at 104. The in-town loop component of the route will provide circulator service in Derry. Estimated cost for six day/week service with five round trips/day is approximately \$113,000. Estimated capital cost is \$100,000. FTA funding for small urban systems would cover 50% of this operating cost, and 80% of the capital cost, requiring a non-federal match of \$57,000 in annual operating funding, and \$20,000 for purchase of a bus.

C. Derry-Salem Connector

This service will mainly provide access to employment and services in Salem for Derry residents. It differs from the Derry-Salem service described under phase one in that it will be a point to point service, connecting to the in-town loop at Wal-Mart, and to the Salem loop at the Mall of New Hampshire. Round trip travel time on the route is one hour. A six trip per day schedule can allow morning and evening commute services, as well as mid-day runs. The remaining two hours of an eight hour schedule can be filled with two additional circuits of the Derry in-town loop to supplement those runs made by the Derry-Manchester connector bus.

Estimated cost for six day/week service with six round trips per day plus two Derry in-town circuits is \$95,000. Estimated capital cost is \$100,000. Required non-federal match will be approximately \$47,000 for annual operating expenses, and \$20,000 for purchase of a bus.

D. Feeder Service from Outlying Towns

Much of the feeder service to the fixed route system can be provided through continued and expanded demand response service. Potential exists for expanding deviated fixed route shopping and appointment runs already provided in the region by Lamprey Health Care. Providing an additional day per week of Salem connector service for the towns of Londonderry-Windham-Pelham; Hampstead-Atkinson-Plaistow; and Danville-Sandown would cost approximately \$30,000/year. The vehicle used to provide this service would be available to the brokerage for general demand response service the remaining two days of the week. Capital cost for an accessible, body-on -chassis vehicle to provide this service will be approximately \$50,000. Required non-federal matching funding therefore will total \$15,000 for operating expenses, and \$10,000 in capital.

E. ADA Complementary Paratransit & System Backup Bus

Providing ADA paratransit over this more extensive service area will require access to a second van, for a combined annual operating cost of \$154,000, or \$77,000 in local match. However, there is also the possibility that as the region's coordinated demand response system grows, the additional demand for ADA rides can be absorbed by other vehicles.

Figure 5.5 - Estimated Cost for Phase II

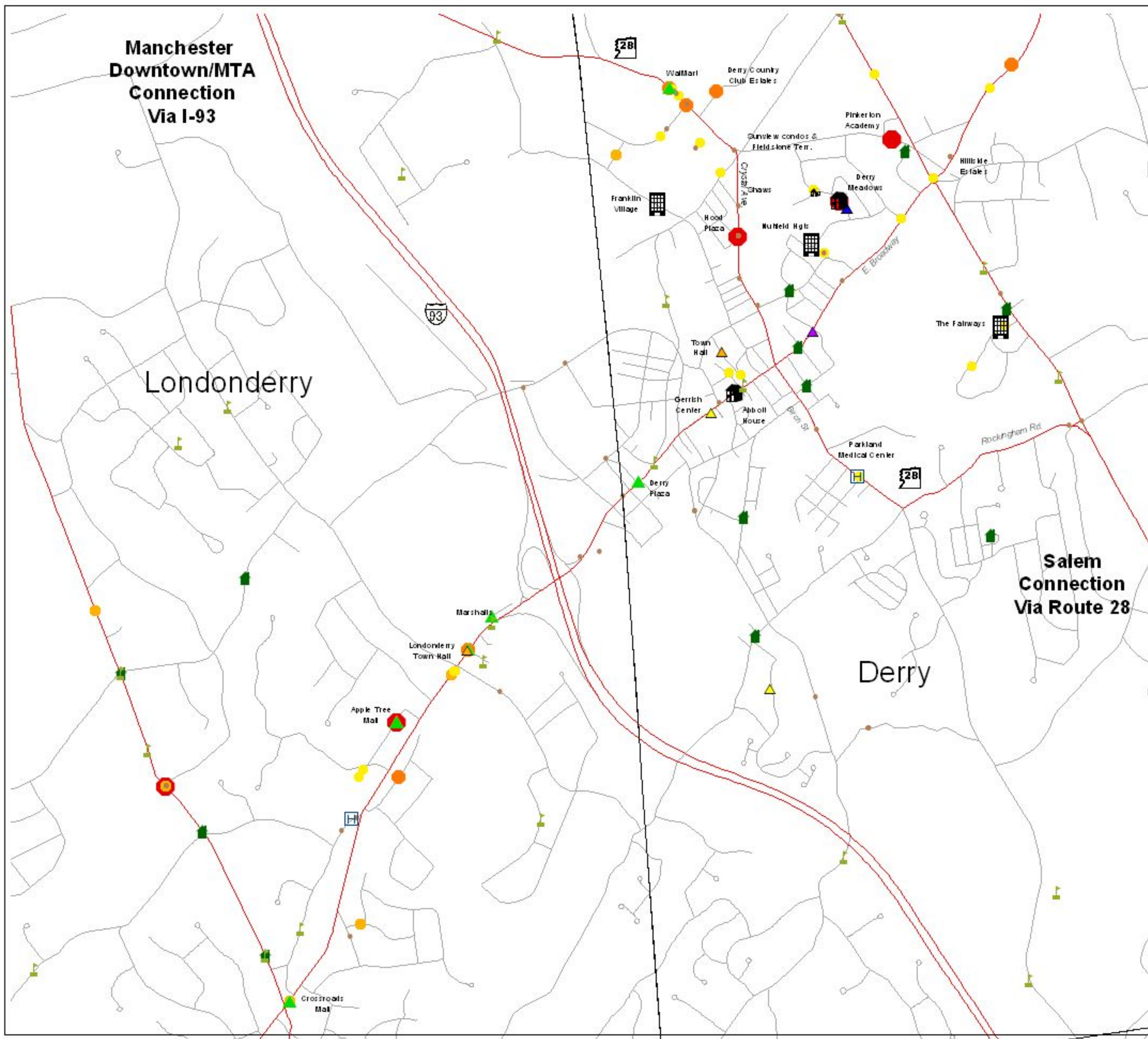
Service	FTA Operating	Operating Match	Total Operating	FTA Capital	Capital Match	Total Capital
Derry-Salem	\$47,329	\$47,329	\$94,657	\$80,000	\$20,000	\$100,000
Salem-Methuen	\$41,735	\$41,735	\$83,470	\$80,000	\$20,000	\$100,000
Derry-Manchester	\$56,472	\$56,472	\$112,943	\$80,000	\$20,000	\$100,000
ADA Paratransit (1 van)	\$38,700	\$38,700	\$77,400	\$40,000	\$10,000	\$50,000
Feeder Service	\$15,000	\$15,000	\$30,000	\$40,000	\$10,000	\$50,000
Backup bus	NA	NA	NA	\$80,000	\$20,000	\$100,000
Total	\$199,235	\$199,235	\$398,470	\$400,000	\$100,000	\$500,000

Total Year 1 Service Cost	\$898,470	Ongoing Costs	
Total Year 1 FTA Funding	\$599,235	Annual FTA Operating	\$199,235
Total Year 1 Match	\$299,235	Annual Operating Match	\$199,235

FUNDING FOR FIXED ROUTE SERVICE

An analysis of funding options to implement these recommendations is included in Chapter 6 - Funding for Regional Transit. Funding for both fixed route and demand response transit in the region will need to come from a combination of federal, state, local, and private sector sources. Funding from the Federal Transit Administration (FTA) is the core of any fixed route transit system. Between FTA capital funding allocated to the NH portion of the Boston urbanized area, and increases in FTA funding received by the state due to urbanized area population growth in the region since 1990, the necessary level of FTA funding is likely available to the region. As of the writing of this draft, the exact amount of additional FTA funding available is not clear. The amount of New Hampshire's sub-allocation of FTA funding for the Boston-Lawrence-Worcester urbanized area is still under negotiation with the MBTA. Similarly, the amount of the new FTA funding available to the study area, together with what entity will manage those funds and oversee the new fixed route transit service, has yet to be negotiated between NHDOT and the three Metropolitan Planning Organizations involved in the region. The larger challenge will be securing adequate non-federal match, which must come from local governments, state government, private sources, or a combination of these. Local support, in particular, will be critical to ensure stable, ongoing funding for public transportation in the region.

Map 1. Derry Loop & Regional Connections



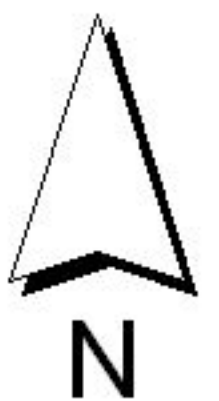
Major Employers	Assisted Housing
26-50	0 - 25
51-100	26 - 50
101-150	51 - 200
151-200	
200+	

- Childcare Facilities
- Centers
 - Family Child Care
 - School Age or Kindergarten Programs
 - Healthcare Facilities
 - Shopping Centers
 - Town Human Service Offices
 - Senior Centers
 - Assisted Living Facilities
 - Adult Daycare
 - Senior Meal Sites

- Town Boundaries
- Major Roads
- Local Roads

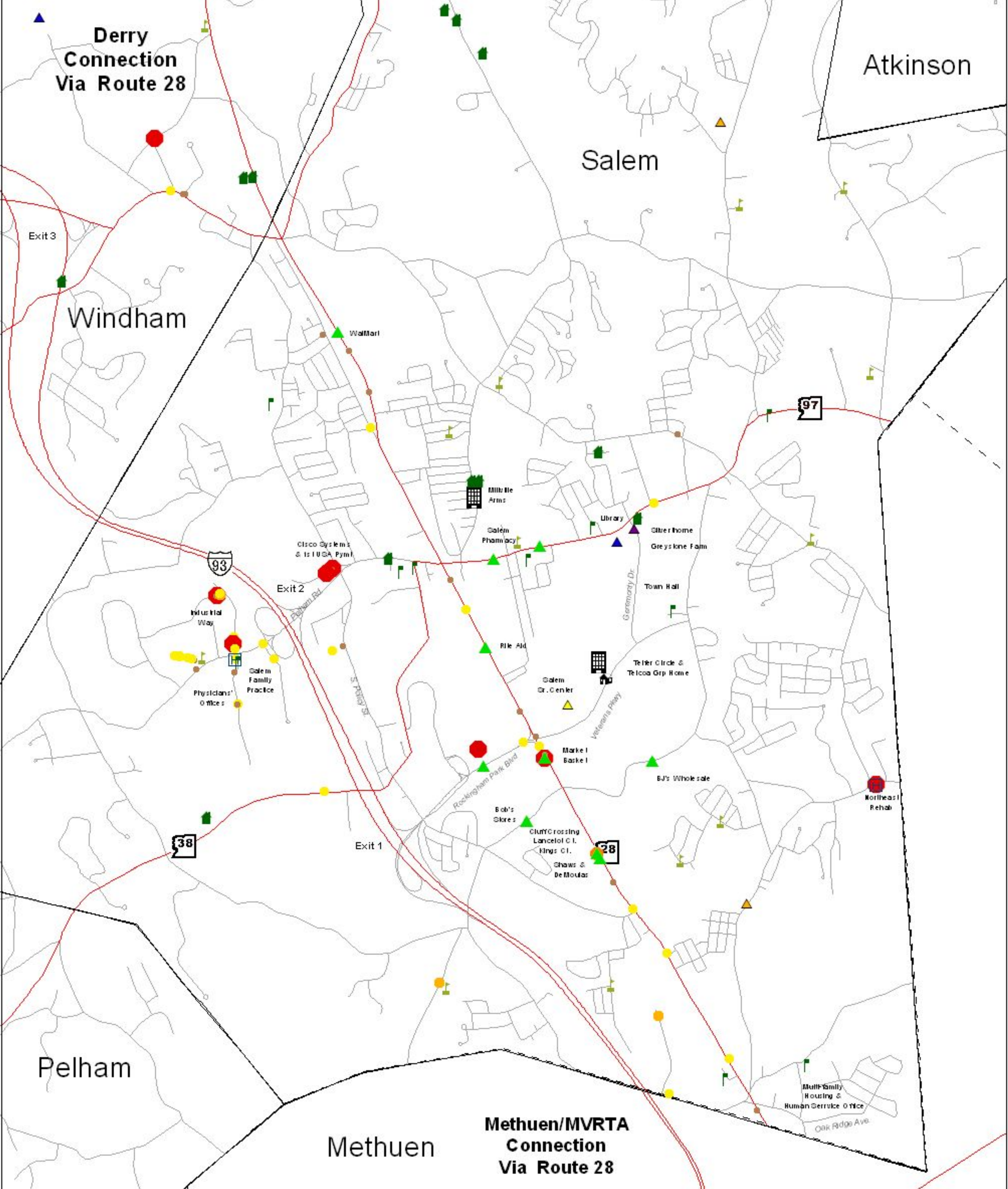
Pop Density (100s/mi²)

- 0 - 2.562
- 2.562 - 4.625
- 4.625 - 7.094
- 7.094 - 9.999



Scale





Map 2. Salem Loop & Regional Connections

- Major Employers

●

 26-50

●

 51-100

●

 101-150

●

 151-200

●

 200+
- Childcare Facilities

■

 Centers

■

 Family Child Care

■

 School Age or Kindergarten Programs
- Assisted Housing

■

 0 - 25

■

 26 - 50

■

 51 - 200
- Town Boundaries

Major Roads

Local Roads
- Healthcare Facilities

Shopping Centers

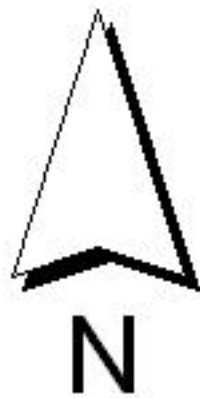
Town Human Service Offices

Senior Centers

Assisted Living Facilities

Adult Daycare

Senior Meal Sites



Chapter 6. Funding Sources

INTRODUCTION

Identifying funding to implement transit coordination and initiation of fixed route service in the region is an essential step in the planning process. Coordination of services entails significant financial and institutional commitment. This chapter outlines funding from a variety of sources, including the Federal Transit Administration (FTA), the NH Department of Transportation (NHDOT), the NH Department of Health and Human Services (NHDHHS), local sources, the Office of State Planning, private foundations, and the Corporation for National Service. The chapter also analyzes the applicability of the different funding sources for this specific project.

Some of the funding programs listed below are more appropriate than others for the start-up phase of a coordination project, but most could eventually prove to be applicable. Depending on the type of service adopted and its stage of implementation, appropriate funding types and amounts will change. For example, a broader range of funding sources is likely to be available for demand response service than for regular fixed route transit service, which is typically supported with FTA funds.

An important factor common to nearly all the funding programs listed below is that they require non-federal (local, state, or private) matching dollars. Securing adequate matching funding is a challenge for all transit systems in New Hampshire. With this in mind, potential sources of matching funding are analyzed.

It should also be stressed that **the successful implementation of either the coordinated demand response or fixed route components of this plan will require ongoing funding commitment from local governments.** Member communities currently contribute less than half of the money for the operation of the Regional Transportation Council (RTC). In order for service to continue, a greater financial commitment from the towns will be required. If town funding does not increase, it is a real possibility that RTC van service will not be able to continue.

The New Hampshire Department of Health and Human Services is in the process of reevaluating how it funds Medicaid transportation, and exploring various options including channeling funding through regional brokerages as called for in the 1995 statewide brokerage study conducted by the Office of State Planning. The state budget situation and the transition to a new Governor and a new Commissioner of DHHS lend a degree of uncertainty to this process. A change in funding resulting from this evaluation is likely several years out. As such, the likelihood of state funding in the short term is somewhat limited, so attention must be paid to securing private foundation support or other flexible sources, at least for the initial phases of the project. While foundations are unlikely to provide ongoing operating support, they will likely be a critical source of funding during the start-up phase.

FEDERAL DEPARTMENT OF TRANSPORTATION

Federal Transit Administration (FTA) Urbanized Area Formula Program (Section 5307)

In New Hampshire, Section 5307 funds are allocated to the state and distributed to transit systems based on a formula including population, population density, and route miles of transit service. Funds are distributed to transit systems designated as FTA recipients by Metropolitan Planning Organization (MPO). Small Urbanized Areas (SUZAs) — areas 50,000 to 200,000 in population — can use funds for capital, maintenance, and operating expenses. In urbanized areas (UZAs) with populations greater than 200,000 these funds may be used only for eligible capital and preventative maintenance expenses. Apportionment of funding is based on a combination of population, population density, and route miles of service.

The 2000 Census redrew the boundaries of the three urbanized areas that are part of the project's study area. Based on the 1990 Census, Salem was part of the Lawrence-Haverhill, Massachusetts urbanized area. Based on the 2000 Census, this region has been incorporated into the greater Boston urbanized area (UZA), such that FTA funding for southern NH is channeled through the Massachusetts Bay Transportation Authority (MBTA). FTA funding available to the Southern NH portion of the Boston UZA totals \$511,000 for FY 2003. As the population of the region is greater than 200,000, this 5307 funding may only be used for capital purchases and preventative maintenance. The Nashua urbanized area and the Manchester urbanized area, on the other hand, are classified as SUZAs, and are thereby entitled to use 5307 funding for capital, maintenance, and operating purposes.

For FY 2003 New Hampshire received an increase in FTA 5307 funding based on population growth in the urbanized areas of the state. Where this FTA funding will be allocated is a decision to be made by formula distribution by NHDOT. One option is formation of a new Regional Transit District including the 11 towns in the study area. This transit district could be designated as an independent recipient of FTA funds. There appears to be interest in the region in forming a new transit district, but establishing such a district is likely to take 1-2 years. Transit service could likely be in place on a shorter timeline if funding is channeled through an existing transit system. Contracting for service with a private provider is also an option. A service contract would be required under FTA regulations to be put out to bid. NHDOT will make a decision on allocation of the new FTA funding in collaboration with the state's MPO's early in 2003.

In the interest of consolidating FTA funding available to the region under one management structure, funds apportioned to Salem and other towns in the Boston urbanized area should be transferred to the entity selected by NHDOT to receive the other FTA funds discussed above, whether that is a new transit district or an existing transit system. FTA funds from the Boston UZA will be used for capital and preventive maintenance costs, while FTA funds allocated to the NH SUZAs will be used for operating costs.

FTA Capital Grants (Section 5309)

These funds for capital purchases offer long-term funding potential for vehicles and facilities. The process of seeking a capital earmark can be lengthy and requires cooperation of the Congressional delegation, as earmarks are made by Congress. To the extent that such capital requests will be made by the State as part of the reauthorization of TEA21, or as an individual budget appropriation request, the region should be sure to make its need known to both the NHDOT and the state's Congressional delegation.

FTA Capital Assistance Program for Elderly & Disabled Persons (Section 5310)

This program provides formula funding to states with the purpose of assisting private-nonprofit groups and certain public bodies in meeting the transportation needs of elders and persons with disabilities. Funds may be used only for capital expenses or purchase-of-service agreements on an 80%/20% matching basis. The NHDOT prioritizes vehicle replacement over fleet expansion with this funding program, and requires that applicants participate in regional coordination efforts where they exist.

Current recipients of 5310 funding in the region include the Kimi Nichols Center, the Lamprey Health Care Senior Transportation Program, the Pelham Senior Van, the Salem Senior Center, and Special Transit Service. The exact amount of 5310 funding available to the region is unclear, though the region can reasonably expect funding for a new handicapped-accessible van every 2-3 years. The next application cycle for 5310 funding will be in early 2003, and a joint application for funds to replace one or more of the older vehicles currently operated by participating providers should be prioritized.

FTA Job Access and Reverse Commute (JARC) Program (Section 3037)

Successful Job Access and Reverse Commute applications require significant coordination between transit, employment services and other local agencies. Funds are given directly to transit systems, and require a 50% non-federal share. State Temporary Aid to Needy Families (TANF) funds are often used as match, and could likely be secured for a project in this region. The primary beneficiaries of this program are low-income families that otherwise would have a difficult time getting to jobs and related services, such as childcare and training.

The JARC program actually authorizes two kinds of grants: *Job Access* grants and *Reverse Commute* grants. Job Access projects are aimed at developing new transportation services for low-income workers and/or filling in gaps in existing services. This program is designed to serve eligible low-income individuals whose family income is at or below 150 percent of the poverty line. Reverse Commute projects are intended to provide transportation to suburban jobs from urban, rural and other suburban locations — but not necessarily just for low-income people. The grants must provide *actual* services. They may not be used for planning or coordinating activities. In addition, these grants must fund new transportation services or fill gaps in existing services. In other words, JARC funds cannot supplant existing sources of funding that already finance a transportation service or program. The administration's proposed FY2004 budget reduces funding to the JARC program substantially, so the level of JARC funding available in the coming funding cycle is uncertain at present.

The project area is well-suited for a JARC project: the largest concentration of TANF recipients in the region is located in Derry, while Salem is the major employment center for the region. The JARC program would be a good source of funding for either a fixed route or demand response linkage between these two centers.

JobLinks

The JobLinks program was established by Congress in 1995 as a demonstration project to test alternate means of filling the gap between employment transportation needs and available services for individuals underserved by public transportation. The program uses FTA and Department of Labor funding, and is administered by the Community Transportation Association of America (CTAA). Funding is available for pilot projects for a period of one year on a 50%/50% matching grant basis. Funds may be used for a range of approaches to improving employment transportation, including coordination of demand response service, and specific fixed route services targeting workers. Project budgets are typically in the range of \$100,000-\$150,000.

Rural Transit Assistance Program (RTAP)

State RTAP funds are intended for education, staff development and technical assistance for rural transit operators. In New Hampshire, these funds are used to support rural transit activities by way of training, technical assistance, research, and support services. As such, this program does not fund operational or capital expenditures. This program does not require a matching share. In 2002, New Hampshire received \$80,834 from RTAP. Even though much of the study area is within an urbanized area, some of it is not. As such, the study area could potentially qualify for this assistance.

Federal Highway Administration (FHWA) Surface Transportation Program (STP)

These funds are typically used for highway construction and are handled by the NHDOT. However, they may be used for any capital project, including transit. Nationally, 4 to 5 percent of STP funds are used for transit projects such as bus procurement or transit facilities, and the vast majority paying for highway projects. States or MPOs may elect to transfer (or “flex”) a portion of STP funding for any projects eligible for funds under FTA programs except urbanized area formula operating assistance. The program requires a non-federal share of 20%.

The New Hampshire Department of Transportation has flexed FHWA funds for transit use once in the past, but it is not common practice in the state. Extensive lobbying would be necessary to secure any of these funds.

Congestion Mitigation and Air Quality (CMAQ) Program

These funds are available to states for programs that reduce traffic congestion and improve air quality. All states receive CMAQ funds. Those states without non-attainment areas (regions with excessive levels of air pollution) transfer their CMAQ allocation to their Surface Transportation Program fund allotment. A non-federal share of 20% is required.

CMAQ funding for transit is typically spent in the following ways: to purchase buses, vans or rail cars; for transit passenger facilities; or for operating support for transit service. Funding may be used for all projects eligible under FTA programs including operating assistance for up to three years. There is a long turnover period in the application process, and CMAQ funding for demand response service would be difficult to justify, as this type of service does not necessarily remove traffic from the roads, nor result in fewer trips.

One could readily justify CMAQ funds, however, for fixed route service, as it does not serve only transit dependent populations. Also positive is the fact that the Salem-Plaistow-Windham MPO has not requested high levels of CMAQ funding in recent rounds. Since regional equity is considered in the granting of CMAQ monies, a CMAQ application for fixed route service in the region could be successful.

DEPARTMENT OF HEALTH AND HUMAN SERVICES (DHHS)

Many federal programs, apart from traditional transit programs, include funds that can be used for transportation. These funds are typically reserved for addressing the transportation needs of the population served by the program, and often can be used only for transportation related to that program, not for the general transportation needs of the participants. In some cases, program funds can be used for general access or to expand overall service in a coordinated system. The Medicaid program accounts for the largest share of NH Department of Health and Human Services (DHHS) transportation expenditures. DHHS is making a concerted effort to better coordinate the transportation services offered by its various divisions both internally and with the Department of Transportation, the results of which should be visible in a few years.

Temporary Assistance for Needy Families (TANF)

TANF is the current name for the federal welfare program, formerly called Aid to Families with Dependent Children. TANF funds are administered by the DHHS Division of Family Assistance (DFA). Of the four main purposes of the TANF program, transit service meets two: providing assistance to needy families and ending dependence of needy parents by promoting job preparation, work, and marriage. There are different ways TANF funds may be used: “assistance” and other types of benefits. Assistance activities are defined in 45 CFR Part 260.31 of the TANF final rule and are subject to a variety of spending limitations and requirements – including work activities, time limits, child support assignment, and data reporting. A State may also choose to fund activities that are not considered “assistance”. These latter activities do not have the same requirements associated with them.

“Assistance” includes benefits directed at basic needs (e.g. food, clothing, shelter, utilities, household goods, personal care items, and general incidental expenses) even when conditioned on participation in a work activity or other community service activity. In NH, All able-bodied TANF adults must participate in the NH Employment Program. Appropriate NHEP activities include employment, job search, On-the Job Training (OJT), job readiness, alternative work experience (AWEP), adult basic education, vocational skills training, post secondary education and barrier resolution. TANF provides many support services to facilitate participation in the above activities. Support services may include child care, mileage reimbursement, bus passes, books, fees and supplies, tuition and reimbursement for other services to remove barriers to

participation in activities. TANF funds may also be used for grants to develop or expand services that promote the major goals of TANF. TANF funds have been committed as match for JARC applications elsewhere in the state and may be a key component of a funding solution for the region.

New Hampshire Employment Program

One of the expected expenses of the project is the funding of drivers. Through the state's Employment Program, this could be achieved at a low cost. The New Hampshire Employment Program On-The-Job Training Program (NHEP OJT) offers an incentive to employers to hire and train eligible applicants. This program reimburses the employer up to 50% of the employee's wages up to a maximum of \$3,500 for the duration of the contract; the training cannot exceed a 26-week period.

The Alternative Work Experience Program (AWEP) is a community service program designed to provide individuals in the New Hampshire Employment Program with work experience opportunities in public and not-for-profit agencies. Agencies interested in providing unpaid work activities to NHEP participants which will help them to upgrade job skills, develop good working habits, establish a recent work history, and gain a better understanding of the employer/employee relationship, are eligible. Employers participating in this program provide a vital community service.

Older Americans Act, Title III

The funding that emerges from this legislation supports the network of agencies and organizations needed to provide home and community based care; it also leverages resources from other federal, state and local entities. One of the permitted uses of the funds (of Title III B: Supportive Services) is transportation for eligible citizens. To receive services, one must be 60 years of age or older. Preference is given to minorities and those with low incomes. The DHHS Department of Elderly and Adult Services (DEAS) administers Title III-B funding in New Hampshire.

Health Care Fund - Community Grant Program

The Community Grant Program supports local health care initiatives statewide by providing grant funding to local organizations through the Health Care Fund (formerly the Health Care Transition Fund). Local recipients have used the grant funds for a variety of innovative projects to promote access to health care, improve its quality and cost-effectiveness, foster the integration of health and social supports in communities, and expand consumer involvement in health care. The Community Grant Program provides a vehicle to pilot improvements in the health care system at the local level and then evaluate their broader application to statewide system change.

Head Start

This is a program of comprehensive services for economically disadvantaged children. Funds are given to local public and nonprofit agencies for various development and education

services, including supporting services such as transportation (coordination is a real possibility here – a local Head Start could seek funding for a vehicle that could be used additionally to serve other needs in the community, or a local transportation provider could be included in a local Head Start proposal as the transportation provider).

Ryan White CARE Act

This act provides funds to urban areas, states and U.S. territories to establish a comprehensive community-based continuum of care including primary medical care and support services for people with HIV infection and AIDS. Title I provides grant funds to eligible metropolitan areas (EMAs) while Title II provides formula grant support to states and territories.

Transit bodies can provide transit or paratransit for their clients. For those not eligible for Medicaid, Ryan White funds can be used to pay for medical transportation as well as transportation to other necessary services such as food shopping, support groups or legal assistance. For those patients who are Medicaid recipients, Medicaid transportation can pay for medical appointments and Ryan White funding can pay for transportation for necessary non-medical trips. The rate of HIV and AIDS infection is quite low in New Hampshire, so it is likely that funds would not be a priority here.

Facilitating Lifespan Excellence (FLEX)

Developed collaboratively by the disability and aging communities within the state, this grant intends to improve health and long-term care service systems and supports for people with disabilities and long-term illnesses to live in the community. One of the suggested solutions in the grant is to reorganize the public transportation system. The University of New Hampshire's Institute on Disability is playing a lead role in this \$2.3 million grant, awarded to the NH DHHS from the Centers for Medicare and Medicaid.

Community Transportation Assistance Project (CTAP)

Sponsored by the U.S. Department of Health and Human Services and administered by the Community Transportation Association of America (CTAA), this project is intended to help improve coordination of human services transportation and public transit resources. It strives to help human service transit providers meet their obligations under the Americans with Disabilities Act (ADA), and to encourage coordination between DHHS-funded transportation with other community public transit services. This program offers technical information and assistance to human service transportation providers, ensuring safe, successful, and cost efficient transportation.

OTHER SOURCES OF STATE AND FEDERAL FUNDS

Community Service Block Grants (CSBG)

These grants are designed to provide a range of services and activities that will have measurable and major impacts on the causes of poverty in New Hampshire communities or those areas of the community where poverty is a particularly acute problem. The Governor's

Office of Energy and Community Services provides the funds for these block grants. Grants are given to the six NH Community Action Agencies to carry out the purposes of the CSBG Act. Five percent of the funds may be reserved for special Community Services Projects, which are innovative and can demonstrate a measurable impact on the causes of poverty in New Hampshire.

Corporation for National Service - AmeriCorps and VISTA Programs

For 35 years, AmeriCorps VISTA has been helping bring communities and individuals out of poverty. Today, nearly 6,000 AmeriCorps VISTA members serve in hundreds of nonprofit organizations and public agencies throughout the country -- working to fight illiteracy, improve health services, create businesses, increase housing opportunities, or bridge the digital divide. The possibility of including a VISTA volunteer in the planning or operations side of the project could be a useful and cost-effective approach.

LOCAL SOURCES

The long term success of transit in the region will depend largely on securing ongoing local funding to match FTA dollars. A summary of current municipal spending on transportation services is included in **Figure 6.1** below. The right hand column shows total spending on transportation services as indicated by town managers and welfare officers in each town. These numbers include funding to the RTC, as well as other organizations such as Lamprey Health Care and the Derry and Salem Caregivers groups. Budgets for town-run senior vans are noted where applicable. Funding to the RTC is broken out in the center column.

Figure 6.1 - Existing Local Funding for Transportation Services

<u>Town</u>	<u>RTC</u>	<u>Total Transit Funding (includes RTC)</u>
Atkinson	\$1,000	\$ 8,700 (includes \$6,000 for senior van)
Chester	\$1,000	\$ 1,400
Danville	\$1,000	\$ 1,000
Derry	\$4,000	\$ 6,000
Hampstead	\$1,000	\$ 6,500
Londonderry	\$3,000	\$ 8,000
Pelham	\$1,250	\$13,250 (includes senior van)
Plaistow	\$1,000	\$ 7,100
Salem	\$5,000	\$20,000 (plus \$54,450 for senior van + taxi)
Sandown	\$1,250	\$ 1,750
Windham	\$1,000	\$ 1,000 (plus Windham senior van)

Source: Spring 2002 survey of Town Administrators and Town Welfare Coordinators

Local General Fund Appropriations

Securing additional town funding is unlikely for the 2003 budget cycle, but should be a focus of efforts in the coming year to secure additional funding in 2004 budgets. This will involve presenting the plan and proposed service improvements to boards of selectmen, welfare

officers, housing authorities, and other and town officials in the coming months. Municipal budgets are perennially tight, and expected budget cuts at the state level are likely to make them tighter. However, municipalities are the main source of matching funding for most transit systems in the state, and a higher commitment will be necessary from each town - especially those that will receive fixed route service. Many towns in the state that are less wealthy than those in the study area fund transit at higher levels than shown below.

Local Option Fee For Transportation Funding

One means of generating local funding is local vehicle registration fees. A New Hampshire law passed in 1998, commonly referred to as HB 648, allows a municipality to collect an additional motor vehicle registration fee of up to \$5.00 for the purpose of supporting a municipal transportation improvement fund. Communities in the study region are not yet taking advantage of this funding source. Of the amount collected, up to 10 percent, but not more than \$0.50 of each fee paid, may be retained for administrative costs. The remaining amount will be deposited into the municipal transportation improvement fund to fund improvements in the local or regional transportation system including roads, bridges, bicycle and pedestrian facilities, parking and intermodal facilities and public transportation.

Figure 6.2 – Funding Potential from HB 648 Local Option Fees

Town	Registrations	Total Funds @ \$5.00 fee
Plaistow	7,978	\$39,890
Salem	29,867	\$149,335
Sandown	4,803	\$24,015
Windham	10,923	\$54,615
Atkinson	6,634	\$33,170
Chester	4,202	\$21,010
Danville	3,606	\$18,030
Derry	28,281	\$141,405
Hampstead	7,797	\$38,985
Londonderry	24,180	\$120,900
Pelham	11,422	\$57,110
REGION	139,693	\$698,465

Figure 6.2 shows the level of local funding that could be raised through adoption of these local registration fees in each of the 11 study area communities based on the number of vehicles registered locally in each town in 2001. If the allowable \$0.50 administrative cost is removed from the total, the net funding potentially available drops 10% to \$628,619.

This amount would more than cover the matching funding needed to implement both the fixed route service and brokerage components of this plan.

Use of the local option fee has several advantages as a local funding source for public transportation. First, it is established as a dedicated source of funds for transportation. Second, it is stable from year to year and not subject to an annual appropriations process. Third, it has the capacity to raise sufficient amounts of money to fund the local match obligation of both an expanded and coordinated demand response system and the fixed route service recommendations in this report.

PRIVATE SOURCES

Business Support

One suggestion from the advisory committee was to approach local chambers of commerce for funding. This avenue should be explored, though chambers' financial situations are typically very limited. Chambers may be able to play a key role in approaching large employers, such as hospitals, supermarkets, higher education institutions and retailers who want the business of the riders and need transportation for workers may be willing to pay for part of the cost of delivering those riders to their doors.

FREDericksburg Regional Transit (FRED) in Fredericksburg, VA has a creative public-private partnership. Starting in 1996 with its initial public transportation survey, businesses and public agencies have been integral funders of FRED. Each partner retail business, hospital or college – provides annual operating funds to ensure that bus routing will include their facility. Partners also place a member on the FRED advisory board, helping to assure that transit planning is integrated into community planning. Together the partners now contribute \$125,000 per year to the transit authority.

Sales of Services and Products

Many transit systems bring in additional dollars through the sale of products and services. One of the most common sources of such income is the sale of advertising space inside or outside the vehicles.

Private Charitable Foundations

Foundation support has been, and will continue to be, vital to the success of transit in the region. Foundation funding allowed the initiation of the RTC's service in the region, and given the probable delay in securing funding from NHDHHS or NHDOT, private foundation funding will likely be critical if coordination is to be established in the coming year.

Key to securing further foundation funding will be the ability to place funding requests in the broader context of this regional plan and the support of the stakeholders who have been involved in its development. Similarly important will be identifying other sources of funding to match foundation commitments. Finally, the RTC will need to demonstrate that following an initial period of foundation support that the project can be sustained through other funding sources.

In general, foundations show a strong preference for financially supporting pilot projects or offering matching funding, and are often unwilling to fund ongoing operating costs. As such, foundation support for pilot project funding should be pursued aggressively for the next two to three years, with the assumption that a stable financing source from the state or federal level could emerge by that point.

In the past, several foundations have been supportive of the Council's work, and these should remain a focus of future funding proposals. These donors, as well as other promising foundations, are listed below:

- The Alexander Eastman Foundation
- The Endowment for Health
- The New Hampshire Charitable Foundation
- The Robert Wood Johnson Community Initiatives
- The Public Health Foundation
- Health and Safety Council
- The Fuller Foundation
- The Agnes Lindsay Trust: Crotched Mountain Foundation

These different foundations provide varying levels of funding for various types of projects; some are more relevant than others. The Alexander Eastman Foundation (AEF), for example, has been vital to the RTC's operation: since 1998, it has provided more than \$117,000. Discussions with the AEF have confirmed that they may be willing to continue to participate if they were part of a leveraged relationship, that is, if their contribution were to be used as matching funds. It must be noted that the AEF cannot be relied upon for long-term funding (as they are not operational funders); the support that the RTC receives from them may be discontinued in two to three years.

The Endowment for Health (EFH) is similar to the AEF in terms of selecting funding recipients. The EFH, however, may be better able to contribute more substantive implementation funding for a comprehensive regional solution. These two specific funders, by way of their preferences and limitations, illustrate the need to continually and aggressively pursue foundation support.

Chapter 7. Findings & Recommendations for Service Coordination

INTRODUCTION

The following pages summarize input received from the Project Advisory Committee and individual providers on options for service coordination, and outline recommendations for service coordination.

FINDINGS FROM PROVIDER INTERVIEWS ON SERVICE COORDINATION

- ◆ Preference for housing a brokerage/call center with an existing agency. A majority of providers interviewed favored housing a brokerage/call center with an existing agency that already provides transportation services rather than establish and staff a new organization to fill the broker/call center role.
- ◆ Provider concerns regarding service standards. While all of the providers interviewed recognize the need for expanded transit service in the region, many are also hesitant about involvement in a coordinated system out of concern that they could lose control of funding, and potentially control of how their clients are served and prioritized. Several providers also expressed concern about the level of service that their current clients would receive under a coordinated system. These providers believe that it will be difficult for a brokered system to offer the same sort of personalized service that they currently offer their clients. It is true that a new reservations agent at a brokerage will not initially have the same rapport with an elderly client as does a program administrator at a small provider agency. However, that rapport can be built, and operating standards can ensure that all clients are treated courteously and appropriate efforts are made to meet their needs.

Equally important to keep in mind is that the current level of service in the region is not fully meeting the needs of the region, and that expanding to meet those needs will require some change. Coordination will allow an expansion of the number of people served in the community, and an increase in the level of service to existing clients.

- ◆ Service Priority. A key condition of participation for several providers is that they be able to give priority to their existing clients with their existing vehicles. Additional clients may be added to existing runs so long as current clients are not refused service or made to wait an inordinately long time. Additional efficiency may be gained by serving new clients at times when vans are not currently in use, as described below. Agencies with concerns about adding any new riders to their existing runs may participate by simply allowing the coordinated system to use their vehicles during periods when they are currently idle.
- ◆ Liability. Liability coverage is a significant concern and area of uncertainty for most providers. Providers often have coverage through insurance carriers that specialize in specific client populations (i.e. elderly or disabled individuals), such that expanding to carry other populations may require coverage changes. The most cost effective approach to liability coverage for a coordinated system will likely be having each provider maintain its current insurance carrier, while adding the broker as an additionally insured. The addition of another insured party on a policy is typically not expensive. The broker and providers

will need to develop agreements specifying the circumstances under which each party will be responsible when vehicles are being shared. Many providers are not aware of their insurance costs, as these costs are covered by towns or are rolled into broader coverage plans. Pinpointing these costs and comparing them to costs for joint purchase of insurance will be a key task in implementation. Providers have agreed to provide information on current insurance coverage levels and carriers.

- ◆ Concerns of volunteer-based agencies. Incorporating existing volunteer drivers into a coordinated system poses challenges. To the extent that volunteers and the provider organizations with which they work are willing to shift scheduling over to the broker, volunteers can be a tremendous resource to the system. They can be especially helpful in providing rides such as shopping trips for which Medicaid or TANF reimbursement are not available. Some volunteers may only want to assist if there is no funding source that will pay for the ride.

The broker can maintain a list of volunteers including the times that they are available to give rides in private vehicles, and the types of clients they would like to serve, and schedule rides accordingly. Such an arrangement is likely with the American Cancer Society. In other cases volunteers may have a strong loyalty to a single provider, and either the volunteer or the provider may prefer that scheduling not be done directly by the brokerage. For example, the Caregiver organizations in Derry and Salem indicated that they could not commit to regular availability of drivers with whom the broker could schedule trips. In this case these providers could be involved in the coordinated system as an option of last resort, such that if the broker is unable to place a rider elsewhere, it may contact one of these providers and ask if a volunteer can be scheduled.

SYSTEM DEVELOPMENT RECOMMENDATIONS

1. **Establish a Regional Transit Brokerage & Pursue Limited Service Consolidation.** The most appropriate coordination model for the region appears to be Brokerage, together with limited consolidation of service delivery. As described in Chapter 4, the Brokerage will centralize the intake, reservations, scheduling, dispatching, and billing functions of the coordinated. Several provider agencies have similarly expressed an interest in contracting with STS to provide all or part of their transportation services, thus allowing the agency to focus on its primary human service mission.

The Project Advisory Committee first considered initiating coordination with a Simplified Call Center model that would not involve payment for rides assigned to providers by the call center/broker. However, the key problem with this approach is that it offers transportation provider agencies no resources to provide additional service. Given limited budgets, most of the provider agencies were reluctant to commit to providing additional rides in the absence of funding to cover associated costs. Implementing the Brokerage model means committing to securing funding sooner rather than later to pay for rides assigned to participating providers. Projected annual cost to staff and equip the call center is estimated at \$105,000.

Figure 7.1 Estimated Staffing & Equipment Budget for Brokerage

Line Item	First Year Budget		Three Year Budget **	
	Unit	Cost	Unit	Cost
<u>Personnel</u>				
Manager		In-Kind		In-Kind
Dispatcher	1.0 FTE	\$25,000	1.0 FTE	\$77,273
Scheduler	0.5 FTE	\$10,000	0.5 FTE	\$30,909
Reservation/Customer Service Agent	0.5 FTE	\$10,000	0.5 FTE	\$30,909
Admin Asst/Billing Clerk	0.5 FTE	\$10,000	0.5 FTE	\$30,909
Direct Labor Subtotal	2.5 FTE	\$55,000	2.5 FTE	\$170,000
Administrative Overhead (32%)		\$17,600		\$54,400
Total On-site Personnel *		\$72,600		\$224,399
<u>Office Expenses</u>				
Office Space Rental (In-Kind) *		\$0		\$0
Telephone		\$1,860		\$5,749
Telephone Equipment		\$175		\$541
Furniture (In-Kind)		\$0		\$0
Postage		\$120		\$371
Office Supplies		\$1,080		\$3,338
Printing/Advertising		\$1,200		\$3,709
Travel		\$915		\$2,828
Total Office Expenses *		\$5,350		\$16,536
<u>Hardware & Software</u>				
Hardware (2 work stations)		\$3,000		\$3,000
Software (Route Match web-based software)	5 concurrent user licenses and training	\$24,680		\$74,040
Total Hardware/Software		\$27,680		\$77,040
Total Call Center Expense		\$105,630		\$317,976

* Assumes office expense estimates and salary ranges from Merrimack County brokerage study, and that office space and furniture will be provided by the broker agency.

** Personnel costs for years two and three grown out at 3%/year

2. **Establish Special Transit Service, Inc., in the Broker role.** The agency best prepared to take on the broker role appears to be Special Transit Service, Inc. There was agreement among the bulk of providers that housing a brokerage with an agency that already had a structure in place for scheduling and dispatching was preferable to creating and staffing an entirely

new organization. The two agencies in the region that currently have the staff in place for scheduling and dispatching are STS and Lamprey Health Care. While either could likely take on the role, a number of factors point to STS as a preferable candidate. These include STS's more extensive presence in the region currently; the existing contractual relationship with RTC, and their in-house maintenance capability, which can potentially be used to coordinate maintenance service for all vehicles in a combined system. STS is already implementing scheduling software, and generally appears best prepared to expand into a regional broker role.

3. **Establish Operating and Service Agreements with Interested Parties.** Decisions by providers whether or not to take part in the coordinated system will depend in large part on the specific provisions of the Draft Memorandum of Understanding (MOU) found in Appendix A. The MOU outlines the responsibilities of both broker and provider agencies, and sets out detailed operating standards for customer service, driver qualifications and training, vehicle maintenance, and other risk management procedures. The operating standards will need to be agreed to by all participating parties. Details of available vehicle time, geographic restrictions on vehicle use, billing rates, and how exactly trips are scheduled will likely vary from provider to provider, and will be negotiated directly between the broker and provider.

As of December 2002, the following providers remain at the table and are interested in pursuing some level of coordination: Lamprey Health Care, CLM Behavioral Health, the Pelham Senior Center, the American Cancer Society the Salem Senior Center, the Rockingham Nutrition Meals on Wheels program, and the Rockingham Adult Medical Daycare program. The Salem Senior Center, the Meals on Wheels program, and the Salem Housing Authority are exploring the option to contract with STS to provide their transportation service. The Upper Room family resource center has indicated a willingness to let their van be used by the coordinated system when it is not in use by their Youth in Action after school program.

The draft version of the MOU included with this report incorporates model language developed by CTAA for use in brokerage systems elsewhere in the country. It has been reviewed by the Project Advisory Committee, and adapted to reflect the concerns of the committee members. However, it is not ready to be signed. We expect that finalizing the operating standards and other aspects of the MOU will require several more months, and include presentations to the boards of directors of the participating providers.

Developing these agreements has taken the stakeholders in the Concord Area Brokerage System (CABS) more than a year and a half since the completion of their original report by ATC Paratransit. The RTC will apply for a second round of funding to underwrite this ongoing planning and initial implementation work, including ongoing consulting services from CTAA or another contractor. Staff time from the Regional Planning Commissions is available to support this effort as well, though extensive involvement of planning commission staff is beyond the scope of their FTA funded transit planning work program, and will likely require additional funding.

4. **Establish an Oversight/Advisory Committee.** An Oversight/Advisory Committee is key to ensuring the efficient running of the coordinated system. The role of the committee is to monitor the performance of the broker/call center and provider agencies, and together with the broker to guide the development of the coordinated system. System development decisions to be made jointly by the oversight committee and the broker include service expansion initiatives, funding sources to pursue, coordinated regional applications to the state for FTA Section 5310 funding for vans, etc.

One option for creating the committee is to reconstitute the Greater Derry-Greater Salem Regional Transportation Council (RTC) board of directors to fill this role. The RTC Board currently consists of nine members, but can be expanded to accommodate representatives from each of the towns in the service area, each of the providers that chooses to participate in the coordinated system, NHDOT, NHDHHS, and any other funding agencies.

5. **Secure resources to fund brokerage operations.** In a traditional brokerage system, the cost of maintaining the brokerage office is covered through administrative fees allowable under Medicaid and other transportation funding programs. In the long term, a shift by NHDHHS to channel Medicaid transportation funding through regional brokerages should allow stable funding both to purchase rides and to maintain a brokerage office. The most likely funding approach in the short term is a combination of private foundation support and JobLinks funding from the Community Transportation Association of America.
6. **Secure resources to put underutilized vans on the road.** A key opportunity to expand service in the region by building on existing resources is to fully utilize the vehicles that are currently in the system but have idle time due to lack of funding for driver time or other factors. The survey identified at least seven vehicles that have large, predictable blocks of time during which they are not in use, totaling as much as 120 hours per week. Securing funding to get these vehicles on the road full time should be a priority. Assuming an hourly operating cost of \$25.80 that incorporates driver time, fuel and oil, maintenance, administrative overhead, and vehicle depreciation, the annual cost to fully utilize these vans is estimated at \$155,000. Using these vans for straight demand response service, such as is provided by the two STS vans currently, with efficiencies achieved through coordinated scheduling these vans should be able to provide approximately 1.8 trips/hour, or an additional 216 trips/week. This would represent approximately a 20% increase in the current number of trips offered in the region. If van time is used for group trips these numbers will be higher. Options for running vans the additional hours include securing funding to hire additional part time drivers to be employed by STS, expanding existing driver positions from part time to full time, or potentially using volunteers.
7. **Expand transit access to low income residents.** The current system offers very little service to the general low-income population of the region. To address this, the coordinated system should pursue federal Job Access Reverse Commute (JARC) funding in the 2003 funding round, as well as the JobLinks funding described above. JARC funding has been awarded in other regions to establish brokerage systems to provide rides to work for TANF clients, and employ TANF clients in transportation system operations. JARC funding could also be used to support commute hour fixed route service between Derry and Salem, given the high number of TANF clients in Derry and the relatively high concentration of jobs in Salem.

JARC funding requires a 50% non-federal match, which is typically provided with TANF funds either directly from the state or from a regional Community Action Program.

8. **Town funding.** Securing additional funding from municipalities will be critical to the development and sustainability of transit in the region. This will particularly be the case in matching FTA funding to establish fixed route transit service in the region, but also applies to development of a coordinated and expanded demand response system. Local matching funding will be necessary for JARC funding, as well as most foundation support. The broker and the advisory committee will need to work with the Regional Planning Commissions to approach the eleven towns in the service area about providing matching funding for expanded service. The approach should present the coordinated system model, including budget needs and ridership estimates; and compare these to current funding and rides provided, as well as typical funding and service levels for other towns around the state.
9. **Advocacy for dedicated state transit funding.** A core problem for transit systems throughout the state is the lack of dedicated state funding available to match federal transit dollars. While better coordination between NHDOT and NHDHHS will improve access to human service funding for coordinated systems, ultimately there is a need for more state funding for transit to serve all groups in the community. The broker and participating providers should work with the New Hampshire Transit Association to advocate for a dedicated source of state funding for transit services.
10. **Establish fixed route transit service in the region.** Extensive fixed route service is usually not practical in an area with population densities as low, and development as dispersed, as much of the Greater Derry-Salem region. However, this sort of service may well be effective in the population centers of Derry and Salem, and to provide connections to employment, retail, and service centers outside of the study area such as Manchester and Methuen. Fixed route service will be key to expanding transit access for transit dependent populations that are not eligible for funding programs such as Medicaid.

Phase I - Chapter 5 recommends a two-phase approach to establishing fixed route service, discussed on page 5-10. Phase I includes a five trip/day, six day/week schedule connecting Derry and Salem, with circulator loops in each town. Also included in the service proposal are operating and capital funds to support required ADA complementary paratransit service, and capital funds for a backup bus. Total annual operating cost is estimated at approximately \$182,000, split evenly between FTA funds and the local match.

Phase II - This second phase expands service to include regional connections to Manchester, and Methuen Massachusetts; as well as several one day per week deviated fixed route services connecting the rural communities of the region with Derry and Salem. Total annual operating cost is estimated at approximately \$400,000, split evenly between FTA funds and local match. Potential management structures for fixed route service are discussed in Chapter 6 - Funding, and include establishment of a new regional transit district, or channeling FTA funds to an existing transit system such as Manchester or Nashua. Adequate FTA funds will likely be available for either of these route options. Securing adequate non-federal matching funding will be the challenge.

Chapter 8. Implementation Plan

INTRODUCTION

The following pages identify specific tasks necessary to implement the recommendations included in Chapter 7. Tasks are grouped under three headings:

- A. Expanding and Coordinating Demand Response Service - Organizational Tasks
- B. Developing a Fixed Route System - Organizational Tasks
- C. Securing Funding

Each task includes a description of the work to be done, an estimated timeline for completion, and a list of the parties involved in implementation. Likely sources of funding are identified where appropriate for each task under headings A and B; while section C identifies specific funding sources, applicability to different project tasks, and steps necessary to secure funds. Tasks are summarized in **Table 8.1** at the end of the chapter.

A. EXPANDING AND COORDINATING DEMAND RESPONSE SERVICE - ORGANIZATIONAL TASKS

1. Secure funding to continue implementation planning process. While the regional planning commissions have FTA funding to provide ongoing support to the project up to a point, additional funding will need to be secured to cover additional consulting services from CTAA, as well as excess RPC staff time. Private foundation support is likely to be the most promising source of this funding. Establishing a funding relationship with one of more as part of the planning process may also be helpful in a subsequent application for implementation funding.

Timeline: January-March 2003

Responsible Parties: RTC & RPCs/MPOs

2. Establish oversight/advisory committee. The role of the committee is to monitor the performance of the broker and provider agencies, and together with the broker to guide the development of the coordinated system. The specific duties and composition of the committee need to be more fully defined, and members recruiting and trained. The project team has approached CTAA about offering a board development workshop in spring 2003. The committee should include participating providers, towns, MPOs/RPCs, DHHS, DOT, other funders, and perhaps key legislators. Committee members will take on roles in promoting the coordinated system and securing funding; thus this task should be expedited.

Timeline: March-June 2003

Responsible Parties: RTC, STS, RPCs/MPOs, technical assistance from CTAA

3. Finalize operating standards with interested providers. The draft Memorandum of Understanding (MOU) included with this document includes input from several Project Advisory Committee meetings, but finalizing language will require additional input from decision makers at each participating provider agency. The blanket provisions that remain to be finalized include operating standards and insurance coverage standards.

Timeline: March-April 2003

Responsible Parties: RTC, RPCs/MPOs, STS, PAC Members/Providers

4. Meet with boards of directors of interested providers to present MOU and secure commitments to participate. Once an agreement has been reached among the Advisory Committee members on blanket MOU provisions, the MOU will need to be presented to the boards of directors of each provider for approval. This will also serve as an opportunity to negotiate specifics of vehicle availability, scheduling procedures, and reimbursement rates.

Timeline: May-June 2003

Responsible Parties: STS, RPCs/MPOs, Providers

5. Implement scheduling software. STS will likely purchase and implement scheduling software for its internal use in advance of funding becoming available to initiate the brokerage. Selection of software remains to be completed.

Timeline: May-June 2003

Responsible Parties: STS, Providers

6. Initiate shared driver training. Training of all drivers to meet the standards agreed to in the draft Memorandum of Understanding will be a low-cost initial step toward coordination.

Timeline: September-October 2003

Responsible Parties: STS, Providers

7. Establish call center at Special Transit Service. Establishing the call center will entail restructuring of STS's scheduling and dispatch procedures, as well as setting up office space at the STS operations center in Manchester, hiring call center staff, purchasing computers, and equipping shared vans with communications equipment. This step is contingent upon securing funding for staff, equipment, and rides. At this point the most promising source of start-up funding to staff the call center appears to be the JobLinks program administered through CTAA. A JobLinks funded program would focus on employment transportation to the extent that it pays directly for rides, but call center staff can also work with other clients. Funding would potentially be available for a period of one year, after which point the system should be able to transition to a combination of FTA and Medicaid funding.

Timeline: April-October 2003

Responsible Parties: STS

8. Begin shared ride scheduling. This will take place as funding becomes available to pay for rides – ideally as soon as fall 2003.

Timeline: October 2003

Responsible Parties: STS, Providers

9. Establish a marketing campaign to raise awareness of expanded demand response service in the region. The lack of demand noted by some providers is likely more indicative of a lack of awareness or perceived difficulty in scheduling rides than of a lack of need and demand. Raising awareness of the expanded availability of rides under the coordinated system will be a key task for the broker and the oversight committee. Funding for outreach will need to be built into all program funding requests. During the start-up phase it will likely come from foundation sources, but should eventually be built into administrative budgets. This should also be an in-kind service contributed by towns and other service agencies.

Timeline: September-October 2003

Responsible Parties: STS, RTC, RPCs/MPOs, Advisory Committee

B. DEVELOPING A FIXED ROUTE SYSTEM - ORGANIZATIONAL TASKS

1. Meet with town officials in Derry and Salem to verify community support for fixed route transit, and come to agreement on routes and schedules. A route connecting Derry and Salem, with circulator service in both towns, appears to be the key initial building block of a regional fixed route network, and will likely be the easiest to justify as a Job Access Reverse Commute project. While initial discussions have taken place with town planners in Derry and Salem, more detailed proposals with route alignment, stop locations, and schedules will need to be brought to town officials to gain their backing prior to presenting the plan to town councils and boards of selectmen. Permission will need to be secured for stop locations, installation of benches, etc.

Timeline: June-October 2003

Responsible Parties: RPCs/MPOs, STS, RTC

2. Secure matching funding for fixed route service from towns, major employers, and private foundation sources. Existing town funding to the RTC will be eligible as match, but additional matching funding from towns will not be available until at least spring 2004 given municipal budget cycles. Securing this increased funding commitment will entail presentation of the plan and a clear analysis of costs and benefits to policy makers in each town. Matching funding support may be available from foundation sources on a shorter timeline, with application windows in spring 2003 and funds available in the fall. Given the large number of major employers in Salem, private business may be an important source of start-up funding.

Timeline: June-October 2003

Responsible Parties: RPCs/MPOs, STS, Advisory Committee

3. Work with NHDOT and the MBTA to secure FTA funding designated for the Southern NH portion of the Boston urbanized area (UZA) (Salem, Plaistow, Hampstead, Danville, Atkinson, Sandown, Windham). At the time of this writing, NHDOT has negotiated an agreement with the MBTA that the Southern NH portion the Boston UZA will receive \$141,000 in FTA funding initially, and an additional \$370,000 once a project to use the funding is added to the State Transportation Improvement Program (STIP).

Timeline: January-June 2003

Responsible Parties: RPCs/MPOs, NHDOT, FTA

4. Arrange consolidation of FTA funds from Boston MPO and FTA funds linked to growth in Derry, Londonderry, and Windham. This will consolidate management of fixed route transit in the region under one entity. Either the Nashua or Manchester transit system could take on this role in the short term. It should be recognized that administration and management of a new transit service is not an easy undertaking and will impose a significant burden on any existing service that agrees to take it on. The decision as to which transit system/MPO receives the new FTA funds allocated to the region, and what level of funding will be available to the study area, rests with NHDOT.

Timeline: January-June 2003

Responsible Parties: NHDOT, RPCs/MPOs

5. Establish Regional Transit District. Develop proposal in cooperation with NHDOT, Rockingham Planning Commission, Southern NH Planning Commission and Nashua Regional Planning Commission to establish a Regional Transit District encompassing the 11 town study area that can serve as an independent FTA recipient. Present proposal to municipal officials in proposed member towns. Subject should be brought up as part of funding discussion during Spring-Summer 2003. If towns respond favorably, warrant articles should be developed for local ballots in spring 2005.

Timeline: 2003-2005

Responsible Parties: RPCs/MPOs, Advisory Committee, NHDOT, Municipalities

C. SECURING FUNDING

1. Municipal Funding - Present plan and funding requests to towns in spring 2003 to begin laying groundwork for 2004 budget. Our expectation is that given tight local budgets, and a local lack of experience funding transit, significant increases in municipal funding are not likely during years one or two. Efforts should include promoting establishment of local vehicle registration fees of up to \$5.00 to provide matching funding for transit. Town budgets are developed in September and October.

Timeline: June-October 2003

Responsible Parties: RPCs/MPOs, STS, Advisory Committee

2. CTAA JobLinks Funding – This program focuses on employment transportation and is administered by the CTAA. Based on conversations with CTAA staff, JobLinks is a potential source of funding for startup of a call center, as well as costs to provide rides to work sites. Typical JobLinks projects are funded in the range of \$100,000-\$150,000/year.

Timeline: Applications due spring 2003 for funding in fall 2003

Responsible Parties: RPCs/MPOs, STS, Advisory Committee

3. Job Access Reverse Commute (JARC) Funding – JARC is a likely source of funding to establish initial fixed route service connecting Derry and Salem, given the relatively large number of TANF clients in Derry, and the concentration of employment sites in Salem. Likely sources of match include TANF dollars from the DHHS Division of Family Assistance, as well as private foundation sources.

Timeline: Applications due July 2003 for funding in early 2004

Responsible Parties: RPCs/MPOs, STS, Advisory Committee

4. Department of Health and Human Services Medicaid Funding - Present proposal to DHHS for using Medicaid funding for pilot brokerage project in the Derry-Salem area. Continue working with DHHS transportation working group to support revised approach to funding human service transportation in the region and state.

Timeline: January 2003 for presentation of plan and pilot project proposal. Communication with the DHHS working group on transportation should be ongoing.

Responsible Parties: RPCs/MPOs, STS, Advisory Committee

5. Private Foundation Sources - Approach private foundations for 2-3 years of pilot funding to establish brokerage and expand both fixed route and demand response service in the region. The Alexander Eastman Foundation and the Endowment for Health have each expressed a willingness to entertain requests for matching funding to secure FTA moneys. Each foundation will accept proposals during spring 2003 for funding in the fall. Also look to Endowment for Health for short term funding to underwrite consultant time in implementation planning. This planning funding may be available on a shorter timeline.

Timeline: January-April 2003 for initial proposal development, then ongoing

Responsible Parties: RPCs/MPOs, STS, Advisory Committee

Table 8.1 - Timeline for Project Implementation

Implementation Step	Jan-Feb '03	Mar-Apr '03	May-Jun '03	Jul-Aug '03	Sep-Oct '03	Nov-Dec '03	Jan-Feb '04	Mar-Apr '04	May-Jun '04	Jul-Aug '04	Sep-Oct '04	Nov-Dec '04
A. Expanding and Coordinating Demand Response Service												
A1. Secure funding to continue implementation planning process (Seek foundation funding for additional consulting services from CTAA).	X											
A2. Establish an Advisory/Oversight Committee (Define role of committee, finalize composition of board, recruit and orient new members).		X	X									
A3. Finalize blanket MOU provisions with interested providers (operating standards, insurance).		X	X									
A4. Meet with boards of directors of interested providers to present MOU, reach agreement on details of participation, and secure commitment to participate.			X									
A5. Implement scheduling software.		X	X									
A6. Initiate shared driver training as an initial, low-cost coordination step.					X							
A7. Establish brokerage call center at STS.			X	X	X							
A8. Begin shared scheduling.					X							
A9. Establish outreach campaign to market expanded demand response service.					X							
B. Developing a Fixed Route System - Organizational Tasks												
B1. Meet with town officials to verify community support and finalize route and schedule recommendations.			X									
B2. Secure matching funding for fixed route service from towns, major employers, and private foundation sources.			X	X	X	X	X	X				
B3. Work with NHDOT and the MBTA to secure FTA funding designated for the Southern NH portion of the Boston MPO.	X	X	X									
B4. Negotiate level of FTA funding available to Londonderry, Derry, and Windham, and arrange consolidation of FTA funds under one MPO.	X	X	X									
B5. Develop proposal in cooperation with NHDOT, SNHPC, and NRPC for a Regional Transit District encompassing the 11 town study area that can serve as an independent FTA recipient. Present proposal to potential municipal members.			X	X	X	X	X	X	X	X	X	X
C. Securing Funding												
C1. Municipal Funding - Present plan and funding requests to towns in spring 2003 to begin laying groundwork for 2004 budget.			X	X	X							
C2. JobLinks - Apply for JobLinks funding through CTAA for call center/ brokerage start-up expenses, and trip costs for employment transportation.		X	X									
C3. JARC - Apply for Job Access Reverse Commute Funding. This will involve the Division of Family Assistance as a source of TANF funding for match.		X	X	X								
C4. DHHS Medicaid - Present proposal to DHHS for using Medicaid funding for pilot brokerage project in the Derry-Salem area. Continue working with DHHS transportation working group to support revised approach to funding human service transportation in the region and state.	X	X	X	X	X	X	X	X	X	X	X	X
C5. Private Foundation Sources - Approach private foundations for 2-3 years of pilot funding to establish brokerage and expand both fixed route and demand response service in the region.	X	X	X	X	X	X	X	X	X	X	X	X

